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**THE EVALUATION OF THE ALABAMA  
FOOD STAMP CASH-OUT DEMONSTRATION:**

**VOLUME I**

**RECIPIENT IMPACTS**

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## **GLOSSARY OF ABBREVIATIONS**

<b>AFDC</b>	<b>Aid to Families with Dependent Children</b>
<b>AME</b>	<b>Adult Male Equivalents (a measure of household size, scaled to take into account different nutritional requirements due to differences in age, gender, and pregnancy and lactation status)</b>
<b>ASSETS</b>	<b>Alabama State's welfare reform program, Avenues of Self Sufficiency through Employment Training Services</b>
<b>ATP</b>	<b>Authorization-To-Participate card (a card issued by county food stamp offices in Alabama and signed by clients that contains the specifications of coupon issuance for each client)</b>
<b>DHR</b>	<b>Alabama Department of Human Resources</b>
<b>EBT</b>	<b>Electronic Benefits Transfer (an alternative form of food stamp benefit issuance)</b>
<b>ENU</b>	<b>Equivalent Nutrition Units (a measure of household size, scaled to take into account different nutritional requirements due to differences in age, gender, pregnancy and lactation status, and numbers of meals eaten at home)</b>
<b>FCU</b>	<b>Food Consumption Unit (the household members who eat meals together)</b>
<b>FIP</b>	<b>Washington State's welfare reform program, Family Independence Project</b>
<b>FNS</b>	<b>U.S. Department of Agriculture, Food and Nutrition Service</b>
<b>FSP</b>	<b>Food Stamp Program</b>
<b>HH</b>	<b>Household</b>
<b>ID</b>	<b>Identification</b>
<b>MPC</b>	<b>Marginal Propensity to Consume (the increase in food purchases resulting from a \$1.00 increase in income or in food stamp benefits)</b>
<b>MPR</b>	<b>Mathematica Policy Research, Inc.</b>
<b>NSLP</b>	<b>National School Lunch Program</b>
<b>RDA</b>	<b>Recommended Dietary Allowance (the daily consumption level of a nutrient believed to be sufficient for good health for most persons; it varies by age and gender)</b>
<b>SBP</b>	<b>School Breakfast Program</b>
<b>SSI</b>	<b>Supplemental Security Income</b>



TFP	Thrifty Food Plan (used as the basis for setting levels of Food Stamp Program benefits)
UI	Unemployment Insurance
USDA	U.S. Department of Agriculture
WIC	Special Supplemental Food Program for Women, Infants, and Children

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## EXECUTIVE SUMMARY

The Alabama Food Stamp Cash-Out Demonstration took place in 12 of Alabama's 67 counties during the period May through December, 1990. Under the demonstration, a small percentage of randomly selected food stamp recipients received their program benefits in the form of checks, rather than in the traditional coupon form. This report describes the impacts of the demonstration on the food-purchasing and food-use patterns of Food Stamp Program (FSP) recipients. It also describes the planning and implementation of the demonstration and assesses the impacts of cash-out on the costs of administering the FSP.

## POLICY CONTEXT

The form of the benefits provided under the FSP has been an issue of long-standing debate. Advocates of the current coupon system argue that coupons are a direct and inexpensive way to ensure that food stamp benefits are used to purchase food. They contend that, despite some evidence of fraud and benefit diversion under the current system, the unauthorized use of food stamps is relatively limited. In addition, they contend that coupons provide some measure of protection to food budgets from other demands on limited household resources.

Advocates of cashing out food stamp benefits argue that the current system limits the food-purchasing choices of recipients and places a stigma on participation in the program. Moreover, they cite the cumbersome nature and cost of coupon issuance, transaction, and redemption.

The current debate about the desirability of one form of food stamp benefit over the other is limited by the paucity of available empirical evidence comparing coupon and cash food benefits. The U.S. Department of Agriculture, Food and Nutrition Service (FNS) conducted two studies in the early 1980s: (1) the evaluation of the Supplemental Security Income/Elderly Cash-Out Demonstration, and (2) the evaluation of Puerto Rico's Nutrition Assistance Program. Although both studies produced useful findings, they examined cash-out as applied to highly atypical food stamp populations--in the first instance, to elderly participants in the program, and, in the second, to participants in Puerto Rico, whose incomes are very low relative to those of participants in the mainland United States. Thus, the results of those studies could not be reliably generalized to the broader food stamp caseload.

Therefore, it is important to obtain additional information about the effects of cash-out, so as to better inform the policy debate. The Alabama Food Stamp Cash-Out Demonstration has been designed to allow a rigorous evaluation of the effects of cash-out. The Alabama demonstration is one of four tests of the cash-out approach that FNS has undertaken since 1989. The other three are: (1) the Washington State Family Independence Program (FIP), (2) the Alabama Avenues to Self-Sufficiency through Employment and Training Services (ASSETS) Demonstration, and (3) the San Diego Food Stamp Cash-Out Demonstration.

The Washington State FIP and the Alabama ASSETS demonstrations are testing cash-out in conjunction with other changes in the welfare systems in those states. However, the Alabama Food Stamp Cash-Out Demonstration, like the San Diego demonstration, is testing cash-out without any other changes. Therefore, it is of particular interest to compare the latter two evaluations. This report provides a number of such comparisons.

## **THE TIMING OF THE DEMONSTRATION**

The Alabama Food Stamp Cash-Out Demonstration was implemented in two urban and ten rural counties in May of 1990. In those counties, approximately 4 percent of the existing caseload and 4 percent of new cases that entered the FSP over the course of the demonstration were randomly selected to receive benefits in the form of checks. December of 1990 was the last month in which cash benefits were issued under the demonstration. As of the date of this report, Alabama continues to issue cash benefits to food stamp recipients in three counties under the separate ASSETS Demonstration.

## **THE SETTING OF THE DEMONSTRATION**

Alabama has a population of 4 million people. On average, those people are more likely to reside in rural areas than is true for the population of the United States as a whole. In addition, residents of Alabama are more likely to be unemployed or to have low incomes than is the case nationwide; Alabama's unemployment rate is one-third higher, and its average per capita income is 20 percent lower, than are those of the United States as a whole.

Alabama's low-income population depends heavily on food stamps. In 1989, 11 percent of the residents of Alabama received food stamps; only six states and the District of Columbia had higher proportions of residents receiving food stamps. At \$146 in July of 1989, the average household food stamp benefit in Alabama was 10 percent higher than the \$135 average in the United States as a whole. This difference is due, in part, to low levels of cash assistance benefits in Alabama. General Assistance is not available in Alabama, and Aid to Families with Dependent Children (AFDC) provides low benefit levels; in 1990, Alabama's maximum monthly AFDC payment of \$118 for a three-person family was the lowest in the nation. Compared with food stamp households nationwide, a higher proportion of food stamp households in Alabama earn income, but the average amount of earned income is relatively low. In addition, food stamp households in Alabama are 60 percent more likely than food stamp households nationwide to be elderly.

These characteristics of Alabama and of those of its residents who are served by the FSP should be kept in mind when assessing the findings from the Alabama Food Stamp Cash-Out Demonstration and when attempting to generalize from those findings to other areas of the United States. The many large differences between food stamp households in Alabama and elsewhere (including other rural states and states with low AFDC benefits) suggest that the Alabama findings might generalize poorly to many other states. These factors highlight the importance of considering the Alabama findings jointly with the findings from the other contemporaneous cash-out evaluations.

## **RESEARCH QUESTIONS AND OUTCOME VARIABLES: RECIPIENT IMPACTS**

This report addresses questions pertaining to the impacts of cash-out on recipients of food stamp benefits and on the administration of the FSP. The research questions and methodologies pertaining to the impacts of cash-out on food stamp recipients are identical in the evaluations of the Alabama and San Diego Food Stamp Cash-Out Demonstrations. They are as follows:

**Does cash-out lead to reductions in the money value of food used at home?** The regular coupon-based FSP provides benefits that, in general, can legally be used to purchase food only at authorized outlets, and to purchase only those items that are eligible under program regulations. This

earmarking of benefits is intended to further the stated objective of the FSP of "raising the levels of nutrition among low-income households" by encouraging recipient households to purchase food for use at home. Thus, the program's direct impact is expected to be on the amounts of food purchased for use at home. The analysis presented in this report examines the effects of cash-out on the money value of purchased food used at home in order to obtain direct evidence as to whether cash-out reduces the means (that is, the use of purchased food at home) through which the FSP is expected to affect nutrition.

The principal outcome measure in the analysis of the money value of purchased food used at home is based on detailed survey data on the use of food at home by households during the seven days that preceded a survey conducted as part of the evaluation. In some components of the analysis, we adjust this measure for differences in household size and composition by dividing the money value of food used by the number of "adult male equivalent" (AME) persons in the household. This measure states a household's size in terms of the number of adult males that would be expected to consume the same amount of food as the household would be expected to consume, given its age and gender composition. We also use a second adjusted measure of household size, the number of "equivalent nutrition units" (ENUs), which further adjusts a household's size to control for the percentage of all meals that its members eat from the home food supply.

The analysis also examines effects on the money value of *all* food used at home, including both purchased food and nonpurchased food. Although spending food coupons and food checks can *directly* affect the use of purchased food only, cash-out might have *indirect* effects on the use of nonpurchased food by making households more likely to use food received through government commodity distribution programs, food received from food pantries or other charitable organizations, food received as gifts from friends and relatives, or home-produced food. Therefore, it is important to assess not only the effects of cash-out on purchased food used at home, but also its effects on all food used at home.

The outcome measures for the analysis of the money value of all food used at home are drawn from the same survey as were the outcome measures described previously. They include measures adjusted for household age and gender composition, as well as for the percentage of meals eaten at home. We estimated the dollar value of nonpurchased food used by a household by using imputed prices; the imputed prices were the average values of the reported prices of similar food items that had been purchased by the households participating in the survey.

**Does cash-out lead to reductions in the nutrients available to household members?** To the extent that cash-out leads to reductions in the use of food at home, there might be associated reductions in the nutrients available to household members. For both check households and coupon households, we examine the average levels of nutrient availability in relation to the recommended dietary allowances (RDAs) for key nutrients.

**Does cash-out lead households to run out of food?** Critics of food stamp cash-out have been concerned that, under this form of benefit issuance, households might spend their benefits on nonfood products and services and, consequently, might run out of food by the end of each month. It is important to assess whether households ran out of food in the Alabama Food Stamp Cash-Out Demonstration. The analysis is based largely on the reported perceptions of respondents to the household survey regarding the adequacy of the food available to their households in the month preceding the survey.

**Does cash-out lead households to switch to food purchased and used away from home?** In general, coupon benefits cannot be used in restaurants. However, cash benefits can be used to purchase food in any location. Therefore, it is of interest to consider whether cash-out leads households to switch their food expenditures from food used at home to food purchased and used away from home. We examine this issue by analyzing both the money value of food purchased away from home and the share of all food expenditures accounted for by food used away from home.

**Does cash-out result in shifts of spending to nonfood consumption categories?** To the extent that cash-out leads to reduced expenditures for food, it might lead to increased expenditures for other

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types of consumption items. To examine this issue, the study analyzes the shares of expenditures for all major categories of consumer goods and services.

**What are the attitudes of program participants toward cash-out?** A full assessment of the cash-out approach to food stamp benefit issuance must consider how program participants perceive check benefits relative to coupon benefits. Of particular interest are participants' attitudes toward the relative flexibility of check benefits and toward the potential food-budgeting problems created by the use of checks. We use survey and focus group data to examine these issues.

**What experiences have clients had when cashing food stamp checks?** It is important to assess whether the value of food stamp benefits to program participants is significantly eroded by any fees that clients might have to pay in order to cash their checks. We use the survey data to examine this and other possible difficulties in the check-cashing process.

## **RESEARCH QUESTIONS AND OUTCOME VARIABLES: ADMINISTRATIVE OUTCOMES**

The Alabama demonstration provided cash benefits to only four percent of the food stamp caseload in 12 out of 67 counties, whereas the San Diego demonstration provided cash benefits to all food stamp recipients after an initial period of providing cash benefits to 20 percent of the caseload. As a consequence of these design differences, the San Diego demonstration can support a more comprehensive analysis of the impacts of cash-out on administrative outcomes. This report addresses the following research questions pertaining to the impacts of cash-out in Alabama on FSP administrative outcomes.

**What tasks and staff were involved in planning and implementing the Alabama Food-Stamp Cash-Out Demonstration?** Analyzing the process of planning, implementing, and operating cash-out in Alabama aids in understanding the demonstration's impact on recipient behaviors, administrative costs, and losses. The process analysis also aids in assessing the degree to which the Alabama experience can be generalized to other states, and the potential usefulness of the demonstration experience for developing future policy. This analysis is based on Alabama Department of Human Resources documents and on interviews with program staff.

**Does switching from coupons to checks reduce benefit-issuance costs? If so, do the savings accrue to the state government or to the federal government?** A major impetus behind the interest in food stamp cash-out is an expected savings in administrative costs through the streamlining of benefit issuance. Switching from coupons to checks eliminates or reduces some issuance activities and costs, but creates or increases others. We use time estimates provided by program staff and data on other resources used in issuance to estimate the savings and cost increases, identify the levels of government at which the savings and costs occur, and arrive at an overall picture of the impacts of cash-out on issuance costs at the federal and state levels of government.

**Does switching from coupon issuance to check issuance reduce or increase the incidence or amount of benefit loss, and in what specific areas?** Loss of benefits can occur through theft during coupon production, shipment, and storage; overissuances due to clerical error; and excessive issuance due to the fraudulent use of authorization-to-participate cards. We assess the impact of the Alabama Food Stamp Cash-Out Demonstration on these types of losses by examining program data on reported losses, supplemented with narrative material from focus group discussions with FSP participants. Our findings include estimates of the amounts of loss borne by the state and federal governments, food stamp recipients, and third parties, and of how those losses changed under cash-out.

## **DATA COLLECTION**

The findings on recipient impacts that we present in this report are based largely on data obtained from an in-person survey of 1,255 check recipients and 1,131 coupon recipients that we conducted between August and November of 1990. Of the responding households, 48 percent resided in the demonstration's two urban counties, and 52 percent resided in the demonstration's ten rural counties, thus closely approximating the 46 percent/54 percent urban/rural distribution of the entire food stamp caseload in Alabama.

The recipient survey obtained detailed information on household composition and income receipt. It also collected very extensive data on the foods used by each household during the seven days preceding the interview. In the survey, respondents were also asked questions about their households' attitudes toward and experiences with cash-out. The survey attained a response rate of 78 percent (80 percent among check recipients; 76 percent among coupon recipients) for the questions on household composition, income, and attitudes, and a rate of 75 percent (78 percent among check recipients; 73 percent among coupon recipients) for the questions on food use.

To supplement the recipient survey data, we also draw on information obtained during four focus group discussions with FSP participants. The discussions were held in one urban site (the city of Birmingham, in Jefferson County) and in one rural site (the town of Fayette, in Fayette County) with participants who had previously received their benefits as coupons, but whose benefit form had been converted to checks. Two sessions were held at each site, one with elderly program participants, and one with nonelderly participants. The focus groups enabled us to explore issues related to client experiences with cash-out in greater depth than was possible in the structured survey.

The findings on administrative outcomes that we present in this report are based on information obtained through in-person and telephone interviews with county-level and state-level FSP staff in Alabama, telephone interviews with representatives of advocacy groups, a mail survey of FSP staff who had handled check-issuance problems, and data compiled or tabulated by FSP staff. We supplement these sources with information obtained from program procedures manuals, official periodic reports on program operations, and other material. Some information was obtained from the focus group discussions with FSP participants. Federal-level issuance costs were obtained from an evaluation of a demonstration of the electronic transfer of food stamp benefits (Kirlin et al., 1990).

## **FINDINGS FROM THE ANALYSIS OF RECIPIENT IMPACTS**

The evaluation of the Alabama Food Stamp Cash-Out Demonstration has produced little evidence of any effect of cash-out on food stamp recipients in Alabama. For almost all outcome

measures corresponding to the study's research questions on recipient impacts, the difference in mean values between check recipients and coupon recipients is small in an economic or nutritional sense and is not significantly different from zero in a statistical sense. This section summarizes the key findings of the study concerning each of the previously highlighted research questions on recipient impacts.

**The money value of food used at home.** The evidence from the household survey indicates that cash-out did not lead to a reduction in the money value of food used at home. As shown in Table 1, the mean weekly value of purchased food used at home (the measure of food use that is most directly affected by the FSP) is \$54.85 for coupon recipients and \$55.46 for check recipients. The 1 percent difference in mean values is not statistically significant. This finding of no reduction in the money value of food used at home under cash-out holds regardless of whether the outcome measure includes only purchased food or includes all food used at home, and regardless of whether the measure is scaled by ENUs to adjust for differences in household composition and differences in the percentage of meals eaten at home.

There is no evidence from this study that the absence of negative impact of cash-out on the money value of food used at home by all food stamp households is masking a negative impact on the subset of food stamp households that are at greatest nutritional risk. A comparison of check and coupon households in the lower tail of the cumulative distribution of the money value of food used at home per ENU revealed that cash-out had virtually no effect on the use of food by those households.

**Nutrient availability.** For food energy, protein, and seven micronutrients that are regarded as potentially problematic from a public health perspective, the estimated effects of the demonstration on availability from food used at home are small, ranging from 0 percent to 3 percent, and mixed in sign (Table 2). These small and statistically insignificant differences between check and coupon recipients support the conclusion that cash-out did not result in a reduction in nutrient availability. Data from the demonstration on the percentages of households for which the availability of these nutrients equals or exceeds the RDAs also support this conclusion. For example, the availability of food energy from food used at home was less than the RDA for 20 percent of both check and coupon households.

**Running out of food.** Cash-out did not increase the incidence of perceived shortages of food in households. Indeed, as shown in Table 3, the percentage of households that reported not having enough food during the month preceding the survey is 3 percentage points lower for check recipients than for coupon recipients (16 percent versus 19 percent). The interview question on which this finding is based asked whether respondents had always had "enough" food during the preceding month. We do not know exactly how respondents interpreted this concept. However, it is interesting to note that the percentages of check and coupon households that reported having not "enough" food are roughly equivalent to the percentages for which the availability of food energy from food used at home was less than the RDA.

Respondent reports on the skipping of meals by household members due to insufficient food also are consistent with the conclusion that cash-out did not increase the incidence of shortages of food. Again, check recipients were somewhat less likely than coupon recipients to report that one or more household members skipped meals during the month preceding the survey because food was unavailable.

TABLE 1  
MONEY VALUE OF FOOD USED AT HOME  
(In Dollars per Week)

	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Money Value of Purchased Food Used at Home</b>					
For the overall household	55.46	54.85	0.61	1.13	0.43
Per equivalent nutrition unit <sup>a</sup>	33.43	33.66	-0.23	-0.69	0.31
<b>Money Value of all Food Used at Home</b>					
For the overall household	60.31	59.54	0.77	1.29	0.50
Per equivalent nutrition unit <sup>a</sup>	36.25	36.41	-0.16	-0.44	0.21

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: In this study, critical values of the t-statistic for a two-tailed test (for example, a test of the hypothesis that cash-out caused a *change* in food use) are 1.960 (95 percent confidence) and 1.645 (90 percent confidence); for a one-tailed test (for example, a test of the hypothesis that cash-out caused a *reduction* in food use), they are 1.645 (95 percent confidence) and 1.282 (90 percent confidence).

One-tailed statistical tests for lower money value of purchased food and all food used at home by check recipients were performed on the check-coupon differences shown in this table. None of the differences is statistically significant at the 90 percent confidence level or higher.

<sup>a</sup>Household size in "equivalent nutrition units" is an adjusted measure of household size that takes into account differences in recommended levels of food energy among households with different compositions in terms of the age, gender, and pregnancy and lactation statuses of household members. In addition, this measure takes into account the percentage of meals eaten at home by household members, as well as meals served by the household to guests.

TABLE 2  
NUTRIENT AVAILABILITY  
PER EQUIVALENT NUTRITION UNIT  
(Nutrient Levels as a Percentage of the RDA)

Nutrient	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Food Energy	162.19	161.46	0.73	0.45	0.22
Protein	258.18	258.99	-0.81	-0.31	0.15
Vitamin A	227.32	229.71	-2.39	-1.04	0.26
Vitamin C	250.63	255.40	-4.77	-1.87	0.60
Vitamin B <sub>6</sub>	157.59	157.30	0.29	0.19	0.09
Folate	223.94	221.69	2.25	1.02	0.39
Calcium	121.34	117.61	3.73	3.18	1.23
Iron	183.99	183.87	0.12	0.06	0.02
Zinc	127.28	128.87	-1.59	-1.23	0.56

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in this table. None of the differences is statistically significant at the 90 percent confidence level or higher.

RDA = recommended dietary allowance.



**TABLE 3**  
**RECIPIENTS' PERCEPTIONS OF THE ADEQUACY**  
**OF THE HOUSEHOLD FOOD SUPPLY**  
**(During Previous Month)**

	Percentage of Respondents		Difference in Percentages		
	Check	Coupon	Absolute	Percentage	t-Statistic
Respondents Reporting Household Did Not Have Enough Food	16.02	18.57	-2.55	-13.74	1.64
Respondents Reporting Household Member Skipped Meals Due to Insufficient Food	8.21	9.90	-1.69	-17.12	1.44

**SOURCE:** Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

**NOTE:** One-tailed statistical tests for lower perceptions of food adequacy among check recipients were performed on the check-coupon differences shown in this table. None of the differences is statistically significant at the 90 percent confidence level or higher.

The household survey provides little evidence that check recipients were more likely than coupon recipients to avoid shortages of food by relying more heavily than coupon recipients on nonpurchased food or on government food-assistance programs. Both groups of recipients reported that they used

TABLE 5  
MOST COMMONLY MENTIONED ADVANTAGES OF CHECKS AND COUPONS

	Percentage of Respondents Mentioning Advantage
<b>Advantages of Checks<sup>a</sup></b>	
Can be used for items other than food	42.9
Do not have to go to issuance office	16.2
More choices of food stores	5.7
Do not feel embarrassed	5.3
Does not involve standing in line for a long time	5.3
More convenient/easier to spend	5.3
<b>Advantages of Coupons<sup>b</sup></b>	
Make sure benefits spent on food	37.8
No sales taxes charged	25.8
Can budget food expenses better	12.6

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

<sup>a</sup>Sample limited to check recipients.

<sup>b</sup>Sample limited to coupon recipients.

Alabama, state and county sales taxes are charged on all cash purchases of food, including purchases made with the proceeds of food stamp checks. Despite the fact that the state augmented the check benefits to offset the sales tax, 26 percent of coupon recipients cited the absence of sales taxes on coupon purchases of food as an advantage of coupon issuance. It is likely that many coupon recipients were unaware of the sales tax offset that was added to the check-benefit amounts.

**Check-cashing experiences.** Seventy-three percent of check recipients cashed their food checks at a supermarket, grocery, or other food store, and another 23 percent cashed or deposited them at a bank (Table 6). Most of these establishments did not charge fees for cashing food stamp checks. Fewer than 1 percent of check recipients used check-cashing outlets, which did charge fees.

The vast majority of check recipients (91 percent) paid no fee to cash their food stamp checks. Most of those who did pay a fee paid \$1 or less (57 percent of fee payers).

## **FINDINGS FROM THE ANALYSIS OF ADMINISTRATIVE OUTCOMES**

The evaluation of the Alabama Food Stamp Cash-Out Demonstration provides findings on the lessons learned during the planning and implementation of the demonstration, and on the impact of cash-out on administrative costs and benefit losses. This section summarizes the key findings of the study concerning each of the previously highlighted research questions on administrative outcomes.

**The planning and implementation of cash-out.** A number of Alabama officials, most notably the Commissioner of the Alabama Department of Human Resources (DHR), were eager to implement a cash-out demonstration. Most of their efforts to achieve that goal occurred in the context of the ASSETS welfare reform demonstration; however, those efforts also made feasible the implementation of "pure cash-out"--the Alabama Food Stamp Cash-Out Demonstration. To garner public support for these demonstrations, the Commissioner and other high-level DHR staff participated in legislative hearings on welfare reform, attended meetings with FSP and public housing staff, and presided over informational meetings on cash-out and welfare reform for retail trade associations, county DHR directors, civic groups, and advocacy groups.

One key issue that had to be resolved before cash-out could be implemented was how to compensate check recipients for state and county sales taxes, which are levied on cash purchases of food, but not on coupon purchases of food. DHR resolved this issue by allocating its own funds to be used to augment the food stamp benefit of each check recipient by 7 percent, the approximate amount of the sales tax. This recurring monthly cost made DHR sensitive to the duration of the demonstration.

The development of the computer software that was an integral component of the check-issuance system was a major challenge in implementing the demonstration. This work absorbed considerable resources, primarily in the form of labor hours by the staff of DHR and a DHR contractor. The software development required more labor hours and more calendar time than was originally anticipated, which was one reason why the implementation of cash-out was delayed by four months, from January to May of 1990. The development of the software was complicated by two factors: (1) Alabama was implementing two related demonstration programs simultaneously ("pure cash-out" and ASSETS), and (2) some modifications to the cash-out automated system, which had been made before the evaluator of the pure cash-out demonstration was hired, had to be changed to fit the needs of the evaluation. With the exception of the modifications to the automated system, cash-out was implemented very smoothly. In addition to the systematic groundwork laid by the Commissioner,

TABLE 6  
CHECK-CASHING EXPERIENCES OF CHECK RECIPIENTS

Check-Cashing Experience	Percentage of Respondents
Place Where Check Is Usually Cashed	
Supermarket, grocery store, or other food store	73.3
Bank	23.4
Check-cashing outlet	0.3
Other	3.0
Was a Fee Charged to Cash Check?	
Yes	9.2
No	90.8
Amount of Check-Cashing Fee, if Fee Was Charged <sup>a</sup>	
\$0.01 to \$1.00	56.9
\$1.01 to \$5.00	38.8
\$5.01 or more	4.3

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

<sup>a</sup>The statistics given in this section of the table are based on the fee amounts that were reported by the 116 households that reported paying a fee to cash their food stamp checks.

an important factor in the ease of implementation was the training provided by DHR to its county and state staff. A DHR staff trainer who was well-informed about cash-out worked full-time to ensure that all relevant DHR staff had a good working knowledge of cash-out and of its associated new procedures.

We estimate that the labor and associated costs of planning and implementing cash-out were \$183,000, with the majority of that amount going to software development. This estimate includes fringe benefits, but does not include overhead. It also includes the cost of contracted services and products.

**Issuance costs.** We found that costs were indeed lower under check issuance than under coupon issuance. Overall, check issuance cost \$1.03 per case-month, or about one-half the cost of coupon issuance, which was \$2.05 per case-month. Columns A and B of Table 7 show that issuance costs incurred at the federal level (\$0.51 per case-month under coupon issuance) were eliminated under check issuance. Issuance costs incurred at the county and state levels were \$1.54 per case-month under coupon issuance, but were only \$1.03 per case-month under check issuance. The federal government pays 100 percent of issuance costs incurred at the federal level, as well as 50 percent of the costs incurred at the county and state levels. This allocation of responsibility for the payment of issuance costs is reflected in Columns C-E of Table 7, which show that three-quarters of the savings in issuance costs resulting from cash-out accrued to the federal government and one-quarter accrued to the state government.

**Benefit losses.** Food stamp cash-out in Alabama virtually eliminated several types of benefit losses that had been borne by either the state or the federal government under coupon issuance. However, these types of losses are quite small under coupon issuance, thus precluding the possibility that cash-out might achieve substantial cost savings in this area.

One type of loss, losses and thefts in the mail, increased significantly under cash-out. This increase was due largely to the increased use of mail issuance under the demonstration. Under coupon issuance in Alabama, most issuances are made on an over-the-counter basis, which is a relatively secure (although expensive) form of issuance. The mail issuance of coupons is generally restricted to small benefit amounts. Under cash-out, food stamp benefit checks were sent to program participants through the mail, an issuance mode that is substantially more vulnerable to losses. Costs resulting from checks being lost or stolen in the mail and then fraudulently cashed averaged \$0.14 per case-month under cash-out. Because the average mailed benefit amount is substantially lower under coupon issuance than under check issuance, the mail loss of benefits is much lower (\$0.05 per mail-issuance case-month) under coupon issuance than under check issuance. This difference should not be interpreted as evidence that coupons are more secure than checks when issued through the mail.

Overall, the analysis implies that issuance-system vulnerabilities increased as a result of cash-out. This increase occurred primarily because of the issuance of food stamp checks by mail, rather than because of the change in the form of benefit. Thus, the additional costs arising from the loss and theft of food stamp checks in the mail is less a cost of cash-out than it is of the change in the mode of delivering benefits to clients. The costs resulting from the loss and theft of benefit checks in the mail were borne by the third parties, such as banks and stores, that cashed the fraudulent checks. (Under the regular coupon-issuance system, the federal government bears the cost of replacing benefits that have been lost in the mail.)

**TABLE 7**  
**COUPON-ISSUANCE AND CHECK-ISSUANCE COSTS PER CASE-MONTH,**  
**BY LEVEL OF GOVERNMENT AT WHICH COSTS ARE INCURRED AND PAID**  
(In Dollars)

	Costs Incurred		Costs Paid		
	Coupon Issuance (A)	Check Issuance (B)	Coupon Issuance (C)	Check Issuance (D)	Savings (E=C-D)
Federal Government	0.51	0.00	1.28	0.515	0.765
State/County Government	1.54	1.03	0.77	0.515	0.255
Total	2.05	1.03	2.05	1.030	1.020

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

NOTE: The amounts shown under "Costs Paid" reflect federal sharing of 50 percent of costs incurred at the state and county levels.

It is likely that losses borne by food stamp clients declined under cash-out, because the FSP replaced checks that were lost or stolen before being endorsed and cashed, whereas the FSP will not replace lost or stolen coupons. In addition, check recipients were less likely to be subject to possible overcharging of food stamp recipients by some food retailers.

## CONCLUSIONS

The potential impact of cash-out on the ability of the FSP to target its benefits specifically to food has been a central component of the policy debate about the desirability of this policy alternative. Opponents of cash-out have been concerned that issuing benefits in the form of checks would greatly weaken the program's impact on food use, whereas proponents have felt that the purchase of food would remain a high priority for recipients, even without the specific linkage to food purchases provided by coupons. Proponents have also argued that cash-out would lower the cost of administering the FSP and the cost of benefit losses.

The evidence from the Alabama Food Stamp Cash-Out Demonstration indicates that, in Alabama, cash-out did not result in lower expenditures for food or in reductions in the amount of nutrients provided by food used at home. The differences between check and coupon recipients in the mean values of these and other outcome variables are 3 percent or less and are mixed in sign. For none of the major outcome variables are the check-coupon differences in mean values statistically significant.

The impact of cash-out on the cost of administering the FSP is also relevant in assessing this policy alternative. We found that the cost of issuing benefits was 50 percent lower under check issuance than under coupon issuance. Costs incurred at the combined county and state levels declined, while costs incurred at the federal level were eliminated. Considering federal sharing of costs incurred at the county and state levels, three-quarters of the savings from the reduced issuance costs accrued to the federal government, and one-quarter accrued to the state government.

The impact of cash-out on benefit losses is also an important policy issue. The costs to the federal and state governments from losses during the production, shipment, and storage of coupons, and from the overissuance of benefits, declined or were eliminated under cash-out. The costs to food stamp recipients associated with the theft and loss of coupons also declined or were eliminated. However, the greater security of checks was more than offset by a higher use of mail issuance, which is more vulnerable than over-the-counter issuance to loss, and by a higher average mailed benefit amount. These two factors resulted in an increase in the per-case-month cost of mail loss that

exceeded the decrease in the per-case-month cost of other types of losses for which we have data.

## I. INTRODUCTION

This report on the evaluation of the Alabama Food Stamp Cash-Out Demonstration describes the effects of a test of food stamp cash-out that was conducted in 12 Alabama counties between May and December of 1990. The report examines impacts of cash-out on the administration of the Food Stamp Program (FSP) and on households participating in the program.

In its examination of household impacts, the report focuses on the effects of cash-out on food expenditures, food use, and nutrient availability. In addition, it considers a number of related issues, such as households' experiences in running out of food, the attitudes of households toward cash-out, and expenditure shifts from food to other goods and services. Volume I of this two-volume report presents the findings of the evaluation on household impacts.

In its examination of impacts on program administration, the report examines differences in operating costs between the experimental check-issuance system, under which benefits are issued by mail, and Alabama's existing coupon-issuance system, under which most benefits are issued over-the-counter. It also describes the planning and implementation of the demonstration and examines the impacts of the demonstration on issuance-system losses. Volume II of this report presents the findings from the analysis of administrative outcomes.

Section A of this introduction provides the background for the analysis by highlighting key policy issues related to cash-out. Section B discusses the relevant previous research, and Section C discusses the overall research strategy of the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) with regard to cash-out. Section D describes the Alabama Food Stamp Cash-Out Demonstration, which was the basis for the findings presented in this report. Section E highlights key aspects of the evaluation design. Section F provides an overview of both volumes of this report.



## **A. KEY POLICY ISSUES**

The form that benefits paid out under the FSP should take has been an issue of long-standing debate. Advocates of the current coupon system argue that the coupon system is a direct and inexpensive way to ensure that recipients of food stamp benefits use their benefits to purchase food. Coupon advocates contend that, despite some evidence of fraud and benefit diversion under the current system, the unauthorized use of food stamps is relatively limited. In addition, they argue that coupons offer some measure of protection to food budgets from other demands on limited household resources.

Advocates of cashing out the FSP argue that the current system is prone to abuse, that it limits the food-purchasing choices of recipients, and that it places a stigma on those who participate in it. Moreover, advocates of cash-out argue that the current system of coupon issuance, transaction, and redemption is both cumbersome and costly.

A number of questions must be answered in order better to inform this policy debate. These include the following eight questions:

1. What is the effect of cash-out on household food use?<sup>1</sup> A central objective of the FSP, regardless of whether benefits are issued as coupons or checks, is to enable participating households to obtain and use the kind and quantity of food that meets their nutritional needs.
2. What is the effect of cash-out on household food expenditures? It is important to examine how recipients of food stamp checks differ from recipients of food stamp coupons in the amount spent on food, the types of stores at which food is purchased, and the proportions of total food expenditures devoted to food eaten at home and to food eaten away from home.
3. What is the effect of cash-out on household expenditures, by major budget categories? Although both food stamp checks and coupons are intended to be spent on food, households might choose to spend check benefits differently from how they would spend coupon benefits. An objective of the research is to

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<sup>1</sup>The term "household food use" refers to food used by a household from its home food supply, including food that was purchased, home-produced, received as a gift or payment-in-kind, or obtained through a government program or a charitable organization. See Section III.A.1.b for a more detailed definition of this term.

determine whether the amounts that households spend in major budget categories, such as housing and transportation, change under cash-out.

4. What are the attitudes of clients toward cash benefits? Little information exists on how program participants will respond to a cash benefit. On the one hand, cash might give participants more flexibility in spending and relieve them of the "stigma" of buying food with coupons. On the other hand, cash might make household budgeting and control over benefits more difficult.
5. How does cash-out affect program administrative costs? The cashing out of food stamp benefits dramatically alters the benefit-issuance process and eliminates an entire range of activities, such as storing and distributing coupons. Eliminating coupon-issuance activities might reduce the total staff requirements of the FSP or free up issuance staff to take on other duties.
6. What problems, if any, are associated with cash-out? Although certain problems, which are associated with coupons, will be eliminated (such as trafficking), others could emerge. Chief among these might be check forgery, high check-cashing fees, and increased food costs resulting from state and local sales taxes on food.
7. What are the effects of cash-out on program participation? It is of interest to determine whether cash-out encourages or discourages participation in the FSP. It is also important to examine any effects of cash-out on average benefit amounts and on the distribution of benefits.
8. What are the effects of cash-out on food retailers? If cash-out changes household food-purchasing habits, authorized food retailers might lose sales. These losses might be partially or fully offset by savings that result from eliminating coupon-redemption processing.

In this report, Mathematica Policy Research, Inc. (MPR) uses data from the Alabama Food Stamp Cash-Out Demonstration to examine the first six of these research issues. The design of the Alabama demonstration precluded consideration of the last two issues, which other parts of the overall cash-out research agenda of FNS (most notably, the San Diego Food Stamp Cash-Out Demonstration) do address. We summarize that research in Section C.

## **B. PREVIOUS FINDINGS**

Research that is based on the ongoing check issuance of food benefits to all participants in Puerto Rico's Nutrition Assistance Program (Beebout et al., 1985; Devaney and Fraker, 1986) and on a 1981 demonstration of check issuance of food stamp benefits to elderly persons and recipients

of Supplemental Security Income (SSI) in two states--Utah and Vermont--plus portions of six other states--Minnesota, New York, Ohio, Oregon, South Carolina, and Virginia--(Blanchard et al., 1982; Butler, Ohls, and Posner, 1985) has shown that, in the context of those studies, check issuance is less expensive than coupon issuance. In addition, the research found no evidence that check issuance reduced food consumption or lowered diet quality. Unfortunately, these findings are of only limited use to policymakers, because they were not based on data for broadly defined cross-sections of FSP participants in the mainland United States.

Reports analyzing the food-consumption patterns of food stamp households that have been included in national surveys provide additional evidence of the impact of cash-out on food consumption. The findings from virtually all studies that were based on nationally representative samples of low-income populations show that food coupons have a much larger impact on food consumption than does ordinary cash income.<sup>2</sup> However, those studies had nonexperimental designs and provide no direct information about the effects of cash food stamp benefits on food consumption. Nevertheless, some analysts have used estimates of the relationship between income and food consumption as a proxy for the potential effects of cash food stamp benefits. Because the estimated impacts of income on food consumption have consistently been lower than the estimated impacts of food benefits, the analysts have concluded that cash-out would reduce food stamp households' consumption of food.<sup>3</sup>

The contradictory findings from these various types of studies leave policymakers with inadequate and conflicting information about the merits and efficacy of cash-out. The evaluations of the Alabama Food Stamp Cash-Out Demonstration and of several related demonstrations, which we summarize in the following section, have been designed to provide policymakers with reliable

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<sup>2</sup>Fraker (1991) reviews many of the existing studies of the effects of food stamps on food consumption and summarizes their principal findings.

<sup>3</sup>See, for example, page 31 of Allen and Gadson (1983), and page 42 of Senauer and Young (1986).

additional information on the comparative costs of check and coupon issuance, and on the differential effects of the two benefit forms on household food use and nutrient availability.

### **C. OVERVIEW OF FNS' RESEARCH STRATEGY FOR FOOD STAMP CASH-OUT**

To increase policymakers' understanding of the effects of cash-out, FNS has approved four major demonstrations of food stamp cash-out:

- **Washington State Family Independence Program (FIP).** Since July of 1988, recipients of Aid to Families with Dependent Children (AFDC) who are served by certain randomly selected welfare offices in Washington State have received their food stamp benefits in the form of checks as one component of a broad set of welfare reform initiatives that is being tested.
- **San Diego Food Stamp Cash-Out Demonstration.** In July of 1989, 20 percent of the food stamp caseload in San Diego County, California was cashed out. All food stamp households in the county were converted to cash food benefits on September 1, 1990.
- **Alabama Food Stamp Cash-Out Demonstration.** Approximately 2,300 households in 12 counties were randomly selected to receive food stamp checks during the period May through December of 1990.
- **Alabama Avenues to Self-Sufficiency through Employment and Training Services (ASSETS) Demonstration.** The ASSETS welfare reform demonstration was implemented on a staggered basis in three Alabama counties during the period May 1990 through January 1991. This demonstration includes a number of changes in the operation of the AFDC program, as well as the cashing-out of food stamp benefits for joint AFDC/food stamp households.

These sites vary substantially on a number of important characteristics, including the amount of the average household food stamp benefit, urbanicity, and the availability of other assistance, such as AFDC and General Assistance. Two of the demonstrations (San Diego and Alabama) were "pure" demonstrations, which involved only cash-out, and two (Washington FIP and Alabama ASSETS) are "mixed" demonstrations, which operate in conjunction with other policy interventions.

Evaluations of each of the four major cash-out demonstrations have been conducted, or are currently under way. The evaluations of the San Diego and Alabama pure cash-out demonstrations will be the most comparable, because these demonstrations did not involve any other policy changes.

Furthermore, because these demonstrations did not entail other policy interventions, they have the greatest potential for shedding light on the specific impacts of cash-out on households participating in the FSP and on the administration of the program.

In this light, it is important to note that the San Diego and Alabama demonstrations provided opportunities to observe cash-out in two very different settings. San Diego is a highly urbanized county in a state with relatively high AFDC benefit levels. Alabama has relatively low AFDC benefit levels, and 10 of the 12 counties included in the Alabama demonstration are predominantly rural.

The findings from the evaluation of the San Diego Food Stamp Cash-Out Demonstration (Ohls et al., 1992) show that, for food stamp recipients in San Diego County, cash-out caused a relatively small, but statistically significant, reduction in the money value of food used at home. Cash-out was also found to have caused small reductions in the availability of food energy and protein. However, cash-out in San Diego reduced the availability of only two of the seven micronutrients studied.

#### **D. THE ALABAMA FOOD STAMP CASH-OUT DEMONSTRATION**

Alabama became interested in food stamp cash-out during the planning phase of a broader welfare reform initiative, the ASSETS Demonstration. In that context, cash-out was one component of an overall strategy, the goals of which were to increase the integration of low-income assistance programs and to help welfare clients achieve self-reliance and self-sufficiency.

When FNS waived FSP regulations so that Alabama could conduct the ASSETS Demonstration, the agency also asked Alabama to test cash-out in the context of a more limited demonstration. By limiting the demonstration to cash-out only, the effects of cash-out could more readily be distinguished from the effects of other changes in the welfare system. We examine that "pure" cash-out demonstration in this report.

The demonstration was conducted in 12 counties in Alabama, 2 of which are highly urbanized, and 10 of which are predominantly rural. At the beginning of the demonstration, in May of 1990, the form of the food stamp benefit was converted from coupons to checks for approximately 2,000

randomly selected households (4 percent of the caseload in the demonstration counties). One-half of the selected households resided in the two urban counties, and one-half resided in the ten rural counties. Subsequent to May of 1990, additional households were randomly selected into experimental status (that is, to receive food stamp checks) as they entered the FSP, with selection probabilities identical to those used to select the initial experimental households. All experimental households that remained in the FSP continued to receive their benefits in the form of checks through December of 1990. Those households reverted to the traditional coupon form of the food stamp benefit in January of 1991.

At the end of June of 1990, 2,004 experimental households were active participants in the FSP. From the households in the 12 demonstration counties that were active recipients of food stamp coupons at that time, 2,012 were randomly selected to serve as control cases. An additional 249 check households and 221 coupon households that entered the FSP subsequent to the end of June and that were active participants at the end of August were also selected to serve, respectively, as experimental and control cases. This additional selection was made in order to replace the original experimental and control cases that had left the FSP, and to ensure an adequate representation of newer cases in the study.

The households in the demonstration received their food stamp checks from the Alabama Department of Human Resources (DHR). The checks were mailed from DHR's main office in Montgomery. The food stamp checks were sent separately from any other assistance payments, such as AFDC benefits, that a household might have been eligible to receive.

The State of Alabama and its individual counties impose a sales tax that is applied to food that is purchased with cash, but which, under federal law, cannot be applied to purchases made with food stamps. Thus, under cash-out, if the dollar amount of checks had been the same as the dollar amount of food coupons, the imposition of the state sales tax on cash purchases of food would have had the effect of decreasing the purchasing power of the benefits received by check households. To offset

this decrease, the amount of the food stamp check that each household received was 7 percent higher than the value of the food stamps to which it was actually entitled. The 7 percent increase reflects the modal value of the sales tax in the demonstration counties. (Because a portion of the sales tax is set locally, the total tax varies between 7 percent and 8 percent across the demonstration counties.) Alabama's DHR used state revenues to provide the supplemental benefit.

## **E. THE RESEARCH DESIGN**

The evaluation of the effects of the Alabama Food Stamp Cash-Out Demonstration has two major components: (1) an evaluation of the impacts on households, and (2) an evaluation of the impacts on program operations. The following sections summarize the research designs for the two components.

### **1. Impacts on Households**

The examination of the impacts of cash-out on households that are participating in the FSP draws heavily on the experimental design of the demonstration, which randomly allocated participating households to either experimental or control status. We used the data that we collected from the two groups to estimate the impacts of the experiment.

#### **a. Analytic Approach**

The random assignment of households in the demonstration to experimental or control status provided an ideal program environment in which to evaluate the effects of cash-out on households' use of food and nutrient availability. Because households were randomly assigned to experimental or to control status, observed differences between the two groups in key outcomes can be ascribed only to the demonstration policies or to statistical sampling error. Therefore, we have based much of the analysis reported in subsequent chapters on direct comparisons between the two groups.

## **b. Data Sources**

This report is based largely on data obtained from an in-person survey of 1,255 check recipients and 1,131 coupon recipients that was conducted between August and November of 1990. The survey obtained detailed information on household composition and income and also collected very extensive data on the foods used by each household during the seven days preceding the interview. In addition, the recipients were asked about their households' attitudes toward and experiences with cash-out. We achieved survey response rates of 78 percent for the questions on household composition, income, and attitudes, and 75 percent for the questions on food use.

To supplement this survey information, we also draw on information obtained during four focus group discussions. The discussions were held with elderly and nonelderly groups in one urban and one rural county in Alabama with FSP participants who previously had received their benefits in the form of coupons, but whose benefit form had been converted to checks at the commencement of the demonstration. The focus groups enabled us to explore issues related to client experiences with cash-out in greater depth than was possible in the structured survey.

## **2. Impacts on Program Operations**

The analysis of impacts on program operations was based primarily on on-site and telephone interviews with state-level and county-level food stamp staff in Alabama. We also used data compiled and reported by Alabama FSP staff, as well as program reports and procedures manuals, a survey of county-level workers who had handled check-issuance problems, and telephone interviews with advocacy groups.

### **a. Analytic Approach**

Many of our findings, especially those from the process analysis of the planning and implementation of the cash-out demonstration, are presented in narrative form. In the analysis of issuance costs, we estimate the costs of labor and other resources used by the different levels of



government in issuing coupons and checks and compare the estimates in tables. We use a similar approach to analyze the costs of planning and implementing the demonstration. In the analysis of benefit loss, we present our estimates in three ways: (1) the dollar amount of issuances lost as a percentage of the total amount issued, (2) the number of issuances lost as a percentage of the total number of issuances, and (3) the per-case-month cost of benefit loss (obtained by dividing a monthly cost by the monthly food stamp caseload).

#### **b. Data Sources**

Two components of the analysis of the impacts of cash-out on program operations--the planning and implementation analysis, and the issuance cost analysis--draw heavily on information that we obtained through structured interviews with state-level staff of DHR and other state agencies in Montgomery and with county-level DHR staff. We supplemented interviews with follow-up telephone interviews with county-level staff. We also conducted a mail survey of county-level workers who had handled check-issuance problems in order to obtain more information on those problems and on how they were resolved.

Other sources of information for the planning and implementation analysis and the issuance cost analysis include telephone interviews with representatives of three advocacy groups, which we conducted to obtain a variety of viewpoints on cash-out; program procedure manuals, reports, and other documents; and federal cost data from Kirlin et al. (1990).

The third component of the analysis of administrative outcomes compares the amount of benefit loss under coupon issuance and check issuance. The primary sources of data for this analysis are the monthly FNS-46 (issuance reconciliation) and FNS-250 (food coupon accountability) reports, the quarterly FNS-259 (food stamp mail issuance) report, and data on check issuance compiled by the Food Stamp Division of DHR. We supplement these sources with information obtained from the interviews with FSP staff and the focus group discussions with clients, both described previously.

## **F. THE STRUCTURE OF THIS REPORT**

This report comprises two volumes. The first volume, which includes Chapters II through VII, focuses on the impacts of the demonstration on recipients of food stamp benefits. The second volume, consisting of Chapters VIII through XIII, examines administrative outcomes of the demonstration. The second volume also presents overall conclusions, which are based on both parts of the analysis, as well as technical appendices.

### **1. Recipient Impacts (Volume I)**

Chapter II describes the context of the Alabama demonstration. It compares Alabama and the nation as a whole on a number of socioeconomic characteristics. It also compares characteristics of food stamp households in Alabama and selected groups of states (sharing Alabama's Census region, having rural status, and having low AFDC benefit levels), in Alabama and California (because San Diego County, California, is the site of the other "pure" cash-out demonstration), and in Alabama and the entire United States.

Chapter III describes the data and methods underlying the analyses of the impact of cash-out on food stamp households. Section A describes the sampling and data collection procedures used to collect the data on which the report is based. Section B describes the analysis strategy. Section C defines key measures used in the analyses of the household survey data. Section D describes the size and characteristics of the check and coupon household samples.

Chapter IV presents findings about the impact of the demonstration on household food use. Sections A through C examine the effects of cash-out on the money value of food used at home, on the kinds and quantities of food used at home, and on the nutrients provided by food used at home. Section D describes the self-assessments made by check and coupon recipients of the adequacy of the food used by their households.

Chapter V examines the impact of cash-out on food and nonfood expenditures and on shopping patterns. Section A presents findings on the pattern of household expenditures for broad categories

of consumer goods and services. Section B presents findings from the household survey on household food-shopping patterns, including the types of stores at which food is purchased and the usual number of shopping trips per month to each type of store.

Chapter VI examines recipient households' attitudes toward and experiences with cash-out. Section A discusses what households like and dislike about food stamp checks and coupons. This discussion is based on data from the household survey and the focus group discussions. Section B presents findings from the same data sources on households' evaluations of the utility of food stamp checks and coupons in managing their food budgets. Section C describes the types of institutions at which households cash their food stamp checks, the charging of check-cashing fees by those institutions, and the incidence of problems associated with check cashing. For check households that began receiving benefits after the commencement of cash-out, Section D presents self-assessments of how the benefit form influenced the households' decision to enter and to continue to participate in the FSP.

Chapter VII compares the results of the Alabama Food Stamp Cash-Out Demonstration with the findings from the San Diego Food Stamp Cash-Out Demonstration. It also discusses possible explanations for observed differences between the two demonstrations.

## **2. Administrative Outcomes (Volume II)**

Chapter VIII, the first chapter in Volume II, briefly reviews the policy issues concerning food stamp cash-out. It also reviews the topics that were covered in Volume I and previews the contents of Volume II.

Chapter IX describes the data and methods underlying the analysis of the impact of cash-out on program administration. It discusses the research questions, the variables that we analyze, the data sources and collection methods, and the analytic techniques that we use in the three components of the analysis. Section A covers the implementation analysis, Section B covers the analysis of administrative costs, and Section C covers the analysis of benefit losses.

Chapter X describes the planning, implementation, and operation of the Alabama Food Stamp Cash-Out Demonstration. It covers the origin of the cash-out idea, how support for cash-out was built, planning activities, problems and issues that had to be resolved, the design of computer software, lessons learned from implementing the demonstration, and coupon-issuance and check-issuance procedures.

costs of planning and implementing the demonstration. Section A compares county-level, state-level, and federal-level costs of coupon and cash issuance on a per-case-month basis. It estimates the reductions in issuance costs resulting from the conversion to cash issuance, and the proportion of the savings that accrue to the federal and state governments. Section B estimates the labor and nonlabor costs of planning and implementing the demonstration.

## II. THE CONTEXT OF ALABAMA'S FOOD STAMP CASH-OUT DEMONSTRATION

The context of the Alabama Food Stamp Cash-Out Demonstration provides a framework for interpreting the results of the demonstration and aids in assessing the degree to which the Alabama experience can be generalized to other states and to the national level. Socioeconomic and demographic characteristics that might influence the results of a food stamp cash-out demonstration are different in Alabama and much of the rest of the country. For example, Alabama has relatively low Aid to Families with Dependent Children (AFDC) payments, which means that food benefits constitute a large proportion of the total income of many food stamp households in Alabama. In addition, Alabama has a relatively high proportion of rural residents, who might respond quite differently from urban residents to cash food benefits.

In this chapter, we present the context of the Alabama Cash-Out Demonstration by comparing Alabama households with U.S. households. In Section A, in one set of comparisons, we focus on such characteristics as per capita income, unemployment rate, household size, average food stamp benefit amount, percent of the population receiving AFDC or Supplemental Security Income (SSI), average and maximum AFDC payments, and percent of the population living in rural areas. In Section B, in a second set of comparisons, we focus only on those households that receive food stamps and compare food stamp households in Alabama with food stamp households in the United States as a whole, and with those in four groups of states comprising: (1) states in the East South Central Census Division,<sup>1</sup> (2) states in the South Census Region,<sup>2</sup> (3) the 15 states with the lowest

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<sup>1</sup>Alabama, Kentucky, Mississippi, and Tennessee.

<sup>2</sup>Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

maximum AFDC payments,<sup>3</sup> and (4) the 15 most rural states.<sup>4</sup>

We also compare food stamp households in Alabama and in California. Alabama differs widely from much of the rest of the United States on a number of important characteristics, which limits the generalizability of the results of the Alabama Food Stamp Cash-Out Demonstration. Thus, the U.S. Department of Agriculture (USDA) chose to conduct another "pure" food stamp cash-out demonstration in San Diego County. California provides a sharp contrast to Alabama on such characteristics as household composition; proportion of households with earned income or AFDC; and average AFDC payments, income, and shelter expense. We compare food stamp households in Alabama with those in California because the findings from the Alabama and the San Diego evaluations might provide a good indication of how a large proportion of the nationwide food stamp caseload would respond to check benefits. Section C summarizes the comparative findings and discusses the extent to which the Alabama Cash-Out Demonstration might be generalized.

The sources of the statistics reported in this chapter include the *1990 Statistical Abstract of the United States*, the *1991 Statistical Abstract of the United States*, the 1980 Census, the 1990 "Green Book" (*Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*), 1989 Food and Nutrition Service Project Area data (state-level Food Stamp Program, or FSP, administrative data), and 1989 Integrated Quality Control System data (household-level FSP administrative data).

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<sup>3</sup>These states are (in order of increasing average AFDC payments) Alabama, Mississippi, Tennessee, Texas, Louisiana, Arkansas, South Carolina, Kentucky, West Virginia, New Mexico, North Carolina, Georgia, Indiana, Missouri, and Arizona.

<sup>4</sup>The 15 states having the highest percentage of their population living in rural areas are (in order of decreasing degree of ruralness) Vermont, West Virginia, South Dakota, Mississippi, Maine, North Carolina, North Dakota, Kentucky, Arkansas, New Hampshire, Montana, Idaho, South Carolina, Iowa, and Alabama (*from Table 16, U.S. Department of Commerce, Bureau of the Census, 1980*).

## **A. A COMPARISON OF ALL HOUSEHOLDS IN ALABAMA AND IN THE UNITED STATES**

Alabama is a relatively poor state, whose low-income residents depend heavily on food stamps.

Table II.1 shows that, compared with the United States as a whole:

- From 1980 to 1988, the population in Alabama increased more slowly.
- Alabama's population has a somewhat higher percentage of children, and approximately the same percentage of elderly persons.
- Personal income per capita is relatively low in Alabama.
- Unemployment is relatively high in Alabama.
- The average household size in Alabama is approximately the same.
- The percentage of persons receiving food stamps is substantially higher in Alabama, and the average food stamp benefit is somewhat higher.
- The percentage of persons receiving AFDC or SSI is approximately the same in Alabama.
- The maximum AFDC payment for a three-person family is substantially lower in Alabama.

Table II.2 ranks Alabama among the 50 states and the District of Columbia on several relevant characteristics. Because Alabama ranks near the bottom of the list on per capita income, and at the bottom on the maximum AFDC payment for a three-person family, it is not surprising that it ranks high on the percentage of households receiving food stamps and on the average food stamp benefit amount. It also ranks well above average on the percentage of the population receiving AFDC or SSI and on the percentage of the population living in rural areas.

TABLE II.1  
SOCIOECONOMIC CHARACTERISTICS OF ALABAMA  
AND THE UNITED STATES AS A WHOLE

Characteristic	Alabama	United States
Population, 1990 (in thousands) <sup>a</sup>	4,041	248,710
Percent Increase in Population, 1980-1990 <sup>a</sup>	3.8 %	9.6 %
Percent of Population in 1989 <sup>b</sup>		
Less than 18 years old	26.9 %	25.8 %
65 years and older	12.7 %	12.5 %
Personal Income per Capita, 1989 <sup>c</sup>	\$11,634	\$14,948
Unemployment Rate, 1989 <sup>d</sup>	7.0 %	5.3 %
Persons per Household, 1990 <sup>e</sup>	2.62	2.63
Persons Receiving Food Stamps, 1989 <sup>f</sup>		
Number (in thousands)	438	18,929
Percent	10.6 %	7.6 %
Average Monthly Food Stamp Benefit, July 1989 <sup>g</sup>		
Per recipient household	\$146	\$133
Per recipient person	\$53	\$51
Percent of Persons Receiving AFDC or SSI, 1989 <sup>h</sup>	6.3 %	6.1 %
Maximum Monthly AFDC Payment for a Three-Person Family, 1990 <sup>i</sup>	\$118	\$364 <sup>j</sup>

SOURCE: Except as noted in footnotes f, g, and i, data are from U.S. Department of Commerce, Bureau of the Census, 1991. Tables from which the data are taken are indicated in footnotes a-f and h.

<sup>a</sup>State Rankings Table, p. xii.

<sup>b</sup>Table 28.

<sup>c</sup>Table 711.

<sup>d</sup>Table 636.

<sup>e</sup>Table 61.

<sup>f</sup>Calculated from data in the State Rankings Table, p. xii, U.S. Department of Commerce, Bureau of the Census, 1990; and Table 611, U.S. Department of Commerce, Bureau of the Census, 1991.

<sup>g</sup>U.S. Department of Agriculture, Food and Nutrition Service, September 1990.

<sup>h</sup>Table 614.

<sup>i</sup>U.S. House of Representatives, Committee on Ways and Means, 1990, Table 10.

<sup>j</sup>The median among the 50 states and Washington, D.C.

AFDC = Aid to Families with Dependent Children; SSI = Supplemental Security Income.



TABLE II.2  
ALABAMA'S RANK AMONG THE 50 STATES  
AND THE DISTRICT OF COLUMBIA

Characteristic	Alabama's Rank
Personal Income per Capita, 1989 <sup>a</sup>	43
Maximum Monthly AFDC Payment for a Three-Person Family, 1990 <sup>b</sup>	51
Percent of Households Receiving Food Stamps, 1989 <sup>c</sup>	8
Percent of Population Receiving AFDC or SSI, 1989 <sup>d</sup>	14
Average Food Stamp Benefit, July 1989 <sup>e</sup>	15
Per person	19
Per household	
Percent of Population Living in Rural Areas, 1980 <sup>f</sup>	15

<sup>a</sup>Table 711, U.S. Department of Commerce, Bureau of the Census, 1991; the District of Columbia is not included.

<sup>b</sup>Calculated from data in Table 10, U.S. House of Representatives, Committee on Ways and Means, 1990.

<sup>c</sup>Calculated from data in Table 611, U.S. Department of Commerce, Bureau of the Census, 1991.

<sup>d</sup>Calculated from data in Table 614, U.S. Department of Commerce, Bureau of the Census, 1991.

<sup>e</sup>Calculated from data in U.S. Department of Agriculture, Food and Nutrition Service, September 1990.

<sup>f</sup>Table 16, U.S. Department of Commerce, Bureau of the Census, 1980.

AFDC = Aid to Families with Dependent Children; SSI = Supplemental Security Income.

## **B. A COMPARISON OF FOOD STAMP HOUSEHOLDS IN ALABAMA AND IN SELECTED GROUPS OF STATES**

For 1989, Table II.3 compares characteristics of food stamp households in Alabama with food stamp households in selected groups of states, in California, and in the United States as a whole; comparisons are made by Census division and region, maximum AFDC payment, and proportion of rural residents. An asterisk for a given characteristic and group of states indicates that the food stamp households in that group are statistically different from the Alabama food stamp households at the 95 percent confidence level.<sup>5</sup> Note that several of the states belong to more than one group; for example, a number of East South Central Division and South Region states also provide low AFDC payments and are relatively rural.

In general, the values of the selected characteristics for food stamp households in the various state groups lie between those of food stamp households in Alabama and in the United States as a whole. Furthermore, the differences between food stamp households in Alabama and those in California are greater than the differences between Alabama and those in the United States as a whole. As expected, these differences suggest that the results of the Alabama Cash-Out Demonstration might be more generalizable to the state groups, and less generalizable to California, than to the United States as a whole. Using the number of characteristics differing significantly between Alabama and each state group as a rough indicator of the degree of similarity shows that the East South Central Division states are most like Alabama; these states differ significantly from Alabama on only 6 of 17 characteristics. The other groups (the South Region states, the 15 states with the lowest maximum AFDC payment for a family of three, and the 15 most rural states) are less like Alabama; each group, which differs on 10 or 11 characteristics, shows roughly the same degree of similarity to Alabama. Food stamp households in Alabama differ significantly from food stamp households in California and in the United States as a whole on all of the characteristics. As noted

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<sup>5</sup>Note that, in Table II.3, values for the state groups include Alabama; however, we excluded Alabama from the groups and calculated new means and distributions before the statistical tests were performed, thereby increasing the power of the comparisons.

previously, some states belong to more than one group. Consequently, the results of the Alabama Cash-Out Demonstration are presumably most generalizable to those states and might be particularly generalizable to Kentucky and Mississippi, which belong to all of the comparison state groups, as does Alabama.

Overall, compared with food stamp households in the United States as a whole, in California, and in the four selected groups of states, food stamp households in Alabama are more often black, and more often elderly. In addition, they consist less often of a married couple with children, receive AFDC less often, receive much lower AFDC payments, depend more heavily on food stamps, and usually have lower expenses for housing.

Some of these characteristics might have a greater influence on food-purchasing patterns and the impact of cash-out on those purchasing patterns than other characteristics. For example, compared with other South Region states, other low-AFDC states, and California, as well as the United States as a whole, Alabama has a relatively high percentage of elderly households among its food stamp population. Therefore, if the elderly tend to have more stable food-purchasing behaviors than do the nonelderly, when food benefits are cashed-out, overall food-purchasing patterns might change less in Alabama than in the other states.

Similarly, because housing costs are lower in Alabama than in all of the comparison groups except the other East South Central states, food stamp households in Alabama might be under less pressure to use some of their check benefits to cover housing costs. The lower pressure might also tend to minimize changes in food-purchasing patterns after food benefits are cashed-out, compared with changes in other states.

On the other hand, the exceptionally low AFDC payments in Alabama (even compared with other low-AFDC states), and the high proportion of total benefits comprised of food stamps (92 percent in Alabama, and much lower elsewhere), might impose financial pressure on AFDC house-

TABLE II.3

COMPARISON OF CHARACTERISTICS OF FOOD STAMP HOUSEHOLDS  
IN ALABAMA AND OTHER STATES, 1989

Characteristic	Alabama	East South Central Division	South Region	15 States with Lowest Maximum AFDC Payments	15 Most Rural States	California <sup>a</sup>	United States as a Whole
Average Size of Household	2.78	2.75	2.74	2.83	2.70	2.93 *	2.62 *
<b>Percent Distributions:</b>							
Age of Householder (Years)		•	•	•	•	•	•
Less than 21	2.2	4.1	4.1	4.2	3.7	12.5	5.7
21 to 35	38.4	38.8	40.6	41.7	39.5	57.4	45.1
36 to 59	29.8	30.3	29.5	30.3	29.7	27.2	30.5
60 and older	29.6	26.9	25.8	23.8	27.0	2.9 *	18.6
Race of Householder		•	•	•	•	•	•
White, non-Hispanic	37.9	52.1	40.4	43.2	57.6	35.7	46.8
Black, non-Hispanic	61.6	47.2	47.3	43.5	39.9	24.1	36.8
Hispanic	0.2	0.1	11.1	11.6	0.5	25.8	12.5
Asian or Pacific Islander	0.2	0.2	0.5	0.4	0.2	11.6	2.0
American Indian or Alaskan Native	0.2	0.3	0.5	1.2	1.4	0.7	1.1
Other	0	0.1	0.2	0.1	0.4	2.1	0.8
Household Composition		•	•	•	•	•	•
Single, no children	34.9	34.7	34.5	32.6	35.0	14.1	35.0
Single, with children	43.8	39.6	43.9	43.8	40.8	71.3	47.8
Married, no children	9.5	8.7	7.0	7.1	7.9	1.2	4.7
Married, with children	11.8	17.0	14.6	16.4	16.3	13.4	12.6
Female-Headed Households	71.0	71.6	74.6 *	74.0 *	72.1	78.6 *	75.8 *
Elderly Households	30.8	28.4	26.9 *	25.1 *	28.3	2.9 *	19.3 *
Households with Earned Income	27.5	27.7	25.6	27.0	26.8	11.7 *	19.6 *
Households Receiving AFDC	22.9	28.3 *	30.7 *	30.4 *	29.4 *	73.9 *	41.9 *
Households with Excess Shelter Deduction	56.9	57.2	62.0 *	60.0	63.2 *	65.7 *	68.3 *

TABLE II.3 (continued)

Characteristic	Alabama	East South Central Division	South Region	15 States with Lowest Maximum AFDC Payments	15 Most Rural States	California <sup>a</sup>	United States as a Whole
Income as a Percent of the Poverty Level						*	*
0	9.0	9.4	9.7	10.1	7.6	11.2	7.1
1 to 50	34.5	33.5	36.2	36.4	32.0	3.7	31.6
51 to 100	49.1	49.2	47.2	46.2	52.0	79.0	53.5
101 to 150	7.4	7.9	6.9	7.2	8.3	5.1	7.4
Average Values: <sup>b</sup>							
Monthly AFDC payment	\$122	165 *	223 *	210 *	236 *	649 *	389 *
Monthly food stamp benefit	\$146	144	145	150	138 *	102 *	130 *
Percent of total benefits comprised of food stamps <sup>c</sup>	92.0	87.8 *	83.3 *	84.5 *	83.2 *	30.1 *	65.5 *
Monthly gross income	\$437	451	449	453	462	668 *	476 *
Monthly net income	\$226	231	224	227	239	418 *	247 *
Monthly housing expense	\$195	207	222 *	218 *	227 *	355 *	268 *
Monthly excess shelter deduction	\$97	104	109 *	107 *	108 *	128 *	122 *
Sample Size (No. of households)	1,239	5,362	19,849	21,069	14,581	2,241	62,251

SOURCE: Tabulations from the USDA/FNS 1989 Integrated Quality Control System.

\*Compared with the Alabama food stamp households, the households in these groups are statistically different at the 95 percent confidence level, based on chi-square tests (for distributions) and t-tests (for proportions and means). Values for the state groups include Alabama; however, we excluded Alabama from the groups and calculated new means and distributions before the statistical tests were performed, thus increasing the power of the comparisons.

<sup>a</sup>In California, SSI recipients (individuals who are age 65 or older, blind, or disabled) receive cash food benefits as part of their SSI payments. SSI households are not included in the statistics shown for food stamp households in California.

<sup>b</sup>For households with values greater than zero.

<sup>c</sup>Total benefits consist of AFDC, GA, and food stamps. The percentages shown are based on all households with food stamps and either zero or positive AFDC and GA incomes.

AFDC = Aid to Families with Dependent Children; SSI = Supplemental Security Income; GA = General Assistance.

holds to use some of their cash food benefits to cover nonfood costs. That pressure might increase overall changes in food-purchasing patterns when benefits are cashed-out.

On the following characteristics, food stamp households in Alabama *are not* significantly different from those in the four state groups, but *are* significantly different from those in California and in the United States as a whole:

- Average household size--food stamp households are larger in California than in Alabama and are smaller in the United States as a whole than in Alabama
- The proportion of households with earned income--the proportions are smaller in California and in the United States as a whole than in Alabama
- The distribution of income as a percent of the poverty level--food stamp households in the United States as a whole, and in California in particular, are more likely than food stamp households in Alabama to have incomes above 50 percent of the poverty level
- Average monthly gross and net incomes--food stamp households in California and in the United States as a whole have larger amounts of both types of income than do food stamp households in Alabama

Alabama food stamp households are significantly different from all of the food stamp households examined in the state groups, in California, and in the United States as a whole on the following characteristics:

- Age distribution of householder--food stamp households in Alabama are significantly less likely to be headed by a person younger than 21 years of age and are significantly more likely to be headed by a person aged 60 years or older
- Race of householder--the food stamp householder in Alabama is significantly more likely to be black
- Household composition--food stamp households in Alabama are significantly less likely to consist of a married couple with children and are significantly more likely to consist of a married couple without children
- Proportion of households receiving AFDC--the proportion of food stamp households receiving AFDC is significantly lower in Alabama

- Average monthly AFDC payment--the average AFDC payment received by food stamp households who also participate in the AFDC Program is much smaller in Alabama
- Percent of total benefits comprised of food stamps, where total benefits consists of food stamps, AFDC, and General Assistance (GA)--the percent is significantly higher in Alabama

### C. SUMMARY

Alabama households, in general, and Alabama food stamp households, in particular, differ from their counterparts in other states or groups of states along a number of dimensions. Overall, Alabama is poorer and more rural and is growing more slowly than is the United States as a whole. Its low-income population depends heavily on food stamps, because AFDC provides low benefit levels, and GA is not available. Compared with the United States as a whole, and with the groups of states specified, a larger proportion of Alabama food stamp households are elderly, and, although a larger proportion is working, income levels are relatively low.

These differences in characteristics might reduce the degree to which the results of the Alabama Cash-Out Demonstration can be generalized to other states and to the United States as a whole. If the elderly have more stable food-purchasing patterns than do the nonelderly, the higher percentage of elderly food stamp households in Alabama might hold down overall changes in purchasing behavior when food benefits are cashed-out. However, the low AFDC payments and income levels in Alabama, and the relatively high proportion of total benefits comprised of food stamps, might create financial constraints that tend to increase changes in purchasing behavior when the food benefit form is converted. Relative to food stamp households in Alabama, food stamp households in the comparison groups of states had neither as high a proportion with elderly members nor the same degree of financial constraint, although the other states in the East South Central Census Division resembled Alabama most closely along these dimensions. Therefore, results of the Alabama Cash-Out Demonstration might generalize most reliably to the other states in the East South Central Census Division. However, caution should be used when generalizing the results to food stamp

households in other states in the South Census Region, or to states that share Alabama's low-AFDC or rural status, as these states differ from Alabama on a number of important characteristics. Finally, the many large differences in characteristics of food stamp households in Alabama relative to those in California and in the United States as a whole suggest that the results of the Alabama Cash-Out Demonstration will generalize poorly to those areas.

The limited degree to which the results of the Alabama Cash-Out Demonstration can be generalized is the reason why the USDA chose to conduct a contemporaneous "pure" food stamp cash-out demonstration in a site (San Diego County, California) that is highly urbanized, has high average income levels, and provides large AFDC payments. The findings from the Alabama and San Diego evaluations might provide a good indication of how a large proportion of the nationwide food stamp caseload would respond to cash-out.



### III. DATA AND METHODS

This chapter describes the data and methods underlying the analyses of the impact of cash-out on recipient outcomes.<sup>1</sup> We obtained the data from a household survey and from focus group discussions. Section A describes the sampling and data collection procedures used to obtain data from food stamp recipients in the demonstration counties. Section B describes the analysis strategy. Section C defines key measures used in the analyses of the household survey data. Section D describes the size and characteristics of the samples of check and coupon households.

#### A. DATA FROM FOOD STAMP HOUSEHOLDS IN ALABAMA

We used two complementary data collection methodologies to obtain data from households that were participating in the Food Stamp Program (FSP) when the Alabama Food Stamp Cash-Out Demonstration was in effect. The first methodology was a survey of coupon and check households, and the second was focus group discussions with check recipients who had previously received coupon benefits. We discuss these data collection methodologies in the next two subsections.

##### 1. The Household Survey

The first methodology that we used to collect data from FSP recipients was a survey of a stratified random sample of 2,386 food stamp households, which consisted of 1,131 check recipients and 1,255 coupon recipients. We chose the size and configuration of the sample in response to the specifications of the U.S. Department of Agriculture (USDA) that (1) the evaluation be capable of detecting a 10 percent reduction in food use resulting from cash-out,<sup>2</sup> and (2) this precision criterion

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<sup>1</sup>We describe the data collection procedures used to obtain data for analyzing the impact of the demonstration on program administration in Volume II, Chapter IX.

<sup>2</sup>More precisely, FNS specified that the evaluation must be capable of detecting a 10 percent reduction in food use with 80 percent power. That is, if cash-out actually caused a 10 percent reduction in food use, then the sample for the evaluation must be sufficiently large that an analyst would have an 80 percent probability of concluding from a statistical test based on the sample data (continued...)

be attainable not only for the entire sample, but also for two subpopulations of the sample, residents of urban counties and residents of rural counties.

The survey instrument, which required an average of 2 hours and 11 minutes to administer, obtained detailed data from the respondents on their households' demographic composition, income, consumption expenditures, food-shopping patterns, attitudes toward the FSP, and, most importantly, the types, quantities, and prices of the foods that they used during the week preceding the interview.<sup>3,4</sup> Appendix A contains additional details about the instrument.

**a. Sampling and Data Collection Procedures**

At the outset of the demonstration, Alabama's counties were divided into two strata, urban and rural, with each stratum including approximately one-half of the state's food stamp population. Random samples of ten rural counties and two urban counties were then selected to participate in the demonstration, with probabilities of selection proportional to size.

After the counties had been selected, households were selected into the demonstration in two phases. In the first phase, the Alabama Department of Human Resources (DHR) used an algorithm designed by MPR to randomly select equal numbers of experimental (check) and control (coupon) households from each demonstration county. When executing the selection algorithm, DHR used data on the active food stamp caseload in the demonstration counties as of April 27, 1990. In May

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<sup>2</sup>(...continued)

that a reduction did occur. FNS further specified that the statistical test must have a 95 percent confidence level. This specification means that the test criterion that must be met in order to conclude that cash-out caused a reduction in food use must be sufficiently demanding that, if met, there is a 95 percent probability that a reduction in food use actually occurred, and only a 5 percent chance that it did not. The 80 percent power and 95 percent confidence requirements are conventional standards for evaluation research.

<sup>3</sup>We present additional information about the time required to administer the household survey instrument in Appendix A.

<sup>4</sup>The same instrument was used in the evaluation of the San Diego Cash-Out Demonstration and in the cash-out component of the evaluation of Washington State's Family Independence Program.

The second phase of the demonstration began on April 28, 1990, and lasted until August 31, 1990. During this phase, DHR used a variant of the phase-1 selection algorithm to randomly assign new ESP households to experimental or control status. The selection probabilities were the same as

At the end of June of 1990, 2,004 experimental households and 2,012 control households were active participants in the FSP. We selected all of these households into the sample for the household survey. In September of 1990, we selected into our sample an additional 249 experimental households and 221 control households that had entered the FSP subsequent to the end of June and that were active participants at the end of August. Thus, the total sample consisted of 4,486 households: 2,253 treatment households and 2,233 control households.

no data on feed use. We were able to obtain complete data, including data on feed use, from 75

of the Alabama food stamp caseload in 1990. (Section E of Appendix A provides additional information on the survey response rates.)

Field staff fully worked all released households from August 4, 1990, through November 18, 1990. As each sample household was released to the survey field staff, an interviewer attempted to conduct an in-person screening interview (the screener) with the household's principal food purchaser and preparer. During that initial contact, the interviewer ascertained whether the household currently was receiving food stamps. If it was, the interviewer asked the respondent to participate in the survey and offered a \$20 incentive to do so (payable on completion of the main interview). The interviewer also obtained demographic data on each member of each screened household and on the household's food-shopping patterns for the preceding month. Toward the end of the screener, the interviewer explained that the principal objective of the survey was to gather data on all foods used by the household during the subsequent seven days and asked that the respondent save the labels of foods used during that period. (See Section III.A.1.b for the definition of "household food use.") The interviewer also asked the respondent to keep additional records, including shopping lists, menus, grocery receipts, and labels from food packages, cans, and bottles.

Seven days after the screener was conducted, the interviewer returned to administer the main survey instrument. The interviewer requested that the respondent refer to the food labels and records in order to respond to the survey's structured questions on the type, quantity, price, and related characteristics of each food item used by the household during the seven-day reporting period.

After completing survey field operations, the information on the type, quantity, and price of each food item was used to construct measures of the aggregate money value and nutritional content of the food that was used. In this report, the aggregate money value and nutritional content of food used are key outcome measures in the analyses of cash-out's impact on households. Appendix C provides additional details on the data file construction and editing procedures for the household survey.

#### **b. Data on Household Food Use and Nutrient Availability**

The use of food by food stamp households is a key issue that we address in this study. The household survey provides detailed information on food used from the household food supply during the seven days preceding the interview. The survey's measure of food used includes all food from the household food supply that was consumed at home, food that was carried from the home and eaten elsewhere, food that was prepared elsewhere (including "fast food" and delivered food) and then brought into the home and consumed, food for humans that was fed to pets, and food that was discarded after being prepared. The measure excludes food that was brought into the home but was not used or prepared, food that was given away or sold to persons outside of the household, ordinary pet food, and food that was given to animals for commercial purposes. The measure of food used includes food that was purchased with cash, credit, or food stamps; food that was received through other food-assistance programs, such as the Special Supplemental Food Program for Women, Infants, and Children (WIC) and local food banks; food that was home-produced; and food that was received as a gift or as payment-in-kind.

As noted, respondent households had been contacted at least seven days before the actual interview and had been asked to maintain records that would help to provide information on food use. For each food item used from the household food supply during the seven days, the interviewer recorded the type of food, its form (fresh, canned, or frozen), the quantity used, the price paid (if appropriate), and its source (purchased, WIC voucher, home-produced, gift, or in-lieu of payment). The interviewer also collected data on the number and type of meals (morning, noon, and evening) eaten from household food supplies by household members and others, the number of snacks and refreshments eaten by guests, and the number of meals eaten away from home by household members.

The data on the prices and quantities were used to analyze the impact of cash-out on two key measures of household food use: (1) the quantity of food used at home, and (2) the money value

of food used at home. In addition, we used data on the quantity of each food item used from the household food supply to calculate the availability of food energy and certain nutrients.<sup>5</sup> In Section III.C.2, we discuss these measures of household food use and nutrient availability, as well as other key outcome measures, in greater detail.

## **2. The Focus Group Discussions**

The second of the two methodologies that we used to collect data from FSP recipients was focus group discussions. We conducted the discussions with four groups in November of 1990. We conducted two of the groups in rural Fayette County, and two in Birmingham. One group in each location was comprised of elderly FSP recipients, and the other was comprised of nonelderly recipients.

We identified and recruited focus group participants from the same FSP caseload data file (April 1990) that we had used to select the household sample for the recipient survey. To be considered for the focus groups, households had to meet two criteria: (1) they had to be currently receiving food stamp benefits in the form of checks and had to have received coupon benefits in the past, and (2) they had to have a telephone.<sup>6</sup>

We conducted the focus groups in the conference rooms of community centers. Using a topic guide, survey professionals led the groups through structured discussions of such topics as relative preferences for checks or for coupons, check-cashing experiences, and the effects of the form of the food stamp benefit on household budgeting and expenditure decisions. Appendix D contains

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<sup>5</sup>We used a USDA nutrient data base to convert the survey data on the quantity of food used to data on nutrient availability. The data base provides information on the nutrient content per pound of roughly 4,000 foods and food combinations in the form in which they enter the household, with adjustments for cooking losses and inedible components of food. Hepburn (1982) provides a description of the USDA's nutrient data base.

<sup>6</sup>We imposed these eligibility requirements because we wanted the focus group participants to discuss their experiences with *both* food stamp coupons and checks, and because we wanted to recruit the participants via telephone so as to minimize recruitment costs.

additional details on the focus groups, including the criteria used to select participants, recruitment, procedures for collecting the data, and the characteristics of participants.

## **B. THE ANALYSIS STRATEGY**

We used the household survey data to conduct three related analyses of the impact of cash-out on FSP households: (1) a comparative analysis of mean values of check and coupon household outcomes, (2) a comparative analysis of regression-adjusted mean values, and (3) an econometric analysis of the marginal propensity to consume food out of coupons, checks, and ordinary cash income. The findings from the focus group discussions were primarily used to enhance our understanding of the behavior underlying the results from the household survey. The remainder of this section contains overviews of the analyses of the household survey and focus group data.

### **1. Analyses of the Household Survey Data**

#### **a. Comparative Analysis of Mean Values**

Reflecting the strength of the randomized design of the demonstration, our principal approach to the analysis of the household survey data was to compare check and coupon households on several key outcomes, and to assess whether the outcomes of the check households differed from those of the coupon households. More formally, we compared the mean values of outcome measures for the samples of coupon and check recipients and conducted statistical tests (t-tests) for the significance of the observed differences. If the check-coupon household difference in the mean values of a particular outcome was statistically different from zero, then, given the experimental design of the demonstration, we concluded that cash-out had affected that outcome.

For purposes of illustration, consider the analysis of the impact of cash-out on total expenditures for food. The hypothesis is that, because food stamp benefits under cash-out no longer are an "in-

kind" benefit earmarked specifically for food, recipients will reduce their food expenditures. Thus, we test the null hypothesis,

$H_0$  :     *No Check-Coupon Household Difference in Expenditures for Food,*

against the alternative hypothesis,

$H_A$  :     *Check Households Spend Less than Coupon Households for Food.*

The test of this hypothesis is based on simple check-coupon household differences in the mean values of food expenditures. If the value of the "test-statistic" is less than the critical value -1.64 (which is the value for a 95 percent confidence level, with a one-tailed test), then we reject the null hypothesis. That is to say, in this case, data from the household survey on the simple difference in mean values of expenditures for food between check and coupon households support the alternative hypothesis that cash-out reduced household expenditures for food.

Note that, because we have a priori information in this case on the expected direction of the impact of cash-out (that is, cash-out might reduce food expenditures), the hypothesis that we test is directional and implies the use of a one-tailed hypothesis test. For the majority of outcomes under consideration, we will have a priori information on the expected direction. However, for some outcomes, such as the quantities of specific types of foods used at home or the number of shopping trips per month, we were uncertain a priori of the likely direction of the impact; for those outcomes, we used a two-tailed variant of the illustrated hypothesis test.<sup>7</sup>

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<sup>7</sup>As an example of a two-tailed hypothesis test, consider the impact of cash-out on the number of shopping trips per month to grocery stores. We test the null hypothesis, no check-coupon household difference in the number of shopping trips per month to grocery stores, against the alternative hypothesis, check households made either more or fewer trips per month to grocery stores than did coupon households. If the value of the "test-statistic," in this case, the difference in the mean values of the number of shopping trips per month to grocery stores for check and coupon households divided by the square root of the variance of this difference, is less than the critical value -1.96 or greater than the critical value +1.96 (for a 95 percent confidence level, with a two-tailed (continued...)



When assessing the cross-sectional, random-assignment, experimental design for this evaluation, it may be useful to consider several alternative designs that we did not adopt. One possible design is a "before and after" approach, which would have entailed a first round of data collection from a sample of coupon households, followed by cash-out, followed by a second round of data collection from a different sample of check households. We rejected this design because of potential difficulties in distinguishing the effects of cash-out from the effects of changes during the interval between the two rounds of data collection in other factors affecting food use, and because of the increased cost of collecting data during two time periods.

A second possible design is a "double-difference" approach, which would have entailed random assignment as well as two rounds of data collection from the same sample of households. Under this approach, the first round of data collection would have occurred prior to cash-out. That round would have been followed by the random assignment of households in the evaluation sample to treatment or to control status, followed (with a lag of several months) by a second round of data collection from both the experimental and control households. This design would have enabled us to better examine the dynamics of how households adjust to the conversion from coupons to checks. However, it would have been more expensive than our chosen design to implement, due to the need to (1) collect data during two different periods of time, and (2) re-locate, during the second period, the households that had provided data during the first period. In addition, the double-difference design would have required a delay in the commencement of cash-out, because we would have had to develop and implement the data collection procedures before the first round of data collection and, hence, well before the commencement of cash-out.

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<sup>7</sup>(...continued)

test), then we reject the null hypothesis of no difference. That is to say, in this case, data from the household survey support the alternative hypothesis, that cash-out affected the number of shopping trips per month to grocery stores. That estimated impact can be positive or negative, depending on the sign of the difference in the mean values.

### **b. Comparative Analysis of Regression-Adjusted Mean Values**

Simple differences in the mean values of outcome variables between the sample of check recipients and the sample of coupon recipients are unbiased estimates of the true effects of cash-out; however, those estimates might not be the most precise estimates. Accordingly, for the outcome measures of greatest interest (those based on the household food-use data), we also used regression analysis to control for variation in the outcome measures arising from a limited number of household characteristics.

However, in our evaluation, the regression-adjusted estimates did not prove to be substantially more precise than the simple-difference-in-means estimates. Furthermore, the conclusions that can be drawn from the regression-adjusted results essentially are the same as those that can be drawn from the simple differences in mean values. Therefore, the estimates of the effects of cash-out that we present in the body of this report were obtained by using the simple-difference-in-means approach. We occasionally refer to the regression-adjusted results, but their detailed presentation is relegated to Appendix E.

### **c. Econometric Analysis of the Marginal Propensity to Consume Food**

The analyses described in the previous two subsections are designed to provide estimates of the *overall* effects of cash-out on the key outcome variables under consideration. It is also of interest to compare the *marginal* impacts of check benefits and of coupon benefits, that is, to determine by how much the impact of an additional dollar of check benefits differs from the impact of an additional dollar of coupon benefits. Estimates of marginal impacts can help to provide a richer understanding of the effects of cash benefits. The estimates also allow us to directly compare our results with those of a number of earlier studies that have focused on the marginal impacts of food stamp benefits on food expenditures.

To conduct a marginal-impact analysis, we developed econometric models that estimate the marginal impacts of the two forms of food stamp benefits. The structure of these models is consistent

with those of models used in earlier studies to estimate the effects of an additional dollar of food stamp benefits on the use of food at home.<sup>8</sup> This structural consistency ensures the comparability of the estimates of the marginal effects of food stamp benefits produced by this study with those produced by earlier studies. However, although of considerable interest, the econometric estimates of the marginal propensities to consume food out of food stamp coupons and out of food stamp checks are not central to the basic findings of this report. Therefore, we present these econometric estimates in Appendix F.

## **2. Descriptive Analyses of Data Obtained from Focus Groups**

All of the formal statistical results presented in this report are based on data collected in the sample survey of food stamp recipients. Because focus group results are based on a small number of nonindependent observations, they cannot be used to test hypotheses about recipient behaviors in any formal statistical sense. Therefore, we used the findings from the focus group discussions to supplement the findings from the household survey. To highlight recipients' perceptions toward and experiences with cash-out, we present quotations from focus group participants in various sections of Chapter VI. In addition, we use findings from the focus group discussions to enhance understanding of the behavior underlying the statistical results presented in Chapter IV (which examines household food use) and in Chapter V (which examines household shopping patterns and food and nonfood expenditures).

## **C. DEFINITIONS OF KEY ANALYSIS VARIABLES**

The survey of coupon and check households provides information on household characteristics, income, program participation, expenditure patterns, food use, and attitudes toward check and coupon benefits. This section defines the key variables used in the analyses of the household survey data, including household food use, nutrient availability, and food and nonfood expenditures. We begin

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<sup>8</sup>For a review of these earlier studies, see Fraker (1990).

the section with a discussion of two measures of household size that were used to scale the key outcome variables. The next three subsections define key outcome measures concerning, respectively, household food use, nutrient availability, and food and nonfood expenditures. Table III.1 lists and defines the main analysis variables.

## **1. Measures of Household Size and Composition**

The principal measure of household size used in this report is the *food consumption unit* (FCU), that is, the group of individuals that usually eats from the home food supply. We determined the size of the FCU on the basis of two questions asked during the interview about each person living in the dwelling unit: (1) whether the person is covered by food stamp benefits, and (2) if not, whether the person eats from the home food supply. Therefore, the size of the FCU cannot exceed that of the household, that is, the total number of persons living in the dwelling unit. On the other hand, the FCU might diverge in either direction from the official *food stamp unit* (FSU), that is, the group of individuals that is included in the food stamp case. The size of the FCU and the size of the FSU could differ either for legitimate reasons or for reasons that might entail fraud under FSP regulations.

When computing the size of the FCU, we treated all household members identically. However, FCUs of equal size might have different requirements for food used at home. The differences might depend on the age, gender, and pregnancy and lactation status of household members; the proportion of meals eaten at home by members of the FCU; and the number of meals served to guests. Therefore, to account for these differences, we use two modified measures of the FCU in this report: (1) the FCU in *adult male equivalents* (AMEs), (2) and the FCU in *equivalent nutrition units* (ENUs).<sup>9</sup> We describe these measures in the next two subsections.

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<sup>9</sup>Henceforth, the term "household" refers to the FCU, unless explicitly stated otherwise.

TABLE III.1

## DEFINITIONS OF KEY VARIABLES USED IN THE ANALYSES OF THE HOUSEHOLD SURVEY DATA

Variable	Definition
<b>Number of Persons in the Household</b>	
Food Stamp Unit (FSU)	Persons living in the dwelling unit who are covered by the recipient's food stamp benefits (ie, household members who are included in the food stamp case).
Food Consumption Unit (FCU)	Persons living in the dwelling unit who are covered by the recipient's food stamp benefits and/or who eat from the food stamp recipient's household food supply.
Adult Male Equivalents (AME)	Accounts for the age and gender of the members of the FCU. Each member of the FCU receives a "weight" determined by the nutritional recommendation for that member for food energy (or another nutrient) relative to the nutritional recommendation for an adult male aged 23 to 50 years. The sum of these weights gives FCU size in AMEs.
Equivalent Nutrition Units (ENU)	Accounts for the age and gender of the members of the FCU and the proportion of meals that they eat from the household food supply. Each member of the FCU receives a "weight" determined by the nutritional recommendation for that member for food energy (or another nutrient) relative to the nutritional recommendation for an adult male aged 23 to 50 years and by the proportion of meals eaten at home. Meals served to guests are also taken into account. The sum of these weights gives FCU size in ENUs.
<b>Household Food Use</b>	
Quantity of Food Used at Home per ENU per Week Total By food group	Quantities of food used (in pounds per person per week) for all food used at home and separately for the 31 food groups corresponding to the Thrifty Food Plan (TFP) plus alcoholic beverages, where "per person" refers to per-ENU.
Total Money Value of Food Used at Home Per household Per AME Per ENU	Money value (in dollars) of all purchased and nonpurchased food used at home during the seven-day reporting period. The measure is obtained by multiplying the quantity of each food item used by its reported or imputed price and summing the money values of each individual food item used at home. Scaled measures of the money value of food used per AME and per ENU are derived by dividing the money value of food used at home per household by measures of household size in, respectively, AME and ENU.
Money Value of Purchased Food Used at Home Per household Per AME Per ENU	Money value (in dollars) of all purchased food used at home during the seven-day reporting period. It is obtained by multiplying the quantity of each purchased food item used at home by its reported price and summing the money values of each individual purchased food item used at home. Scaled measures of the money value of purchased food used per AME and per ENU are derived by dividing the money value of purchased food used at home per household by measures of household size in, respectively, AME and ENU.

TABLE III.1 (continued)

Variable	Definition
Money Value of Nonpurchased Food Used at Home Per household Per AME Per ENU	Money value (in dollars) of all nonpurchased food used at home during the seven-day reporting period, where nonpurchased food consists of home-produced food, food received as a gift or in-lieu of payment, and food received through other food-assistance programs. It is obtained by multiplying the quantity of each food item used at home that was not purchased by an imputed price and summing the money values of each individual nonpurchased food item used at home. Scaled measures of the money value of nonpurchased food used per AME and per ENU are derived by dividing the money value of nonpurchased food used at home per household by measures of household size in, respectively, AME and ENU.
Money Value of Food Used at Home per ENU, by Food Group	Money value (in dollars per week) of food used at home per ENU, by the 31 food groups in the TFP plus alcoholic beverages. The value is obtained for each aggregated food group by summing the money values of the individual food items comprising that food group and dividing the result by household size in ENU.
Share of Money Value of Food Used at Home per ENU, by Food Group	The share of money value of food used at home per ENU, by food group, is the percentage of the total money value of food used by a household from its home food supply per person that is accounted for by each of the 31 TFP food groups plus alcoholic beverages.
<b>Availability of Nutrients from Food Used at Home</b>	
Nutrient Availability per ENU	Nutrients available from all food used by a household from its home food supply during the seven-day period expressed on a per-ENU basis. It is calculated by multiplying the nutrient content per pound of each food item by the number of pounds used of each food item and summing across the products for each food item. The nutrients examined are food energy, protein, and seven micronutrients that are considered to be potentially problematic from a public health perspective: vitamin A, vitamin C, vitamin B <sub>6</sub> , folate, calcium, iron, and zinc.
Nutrient Availability per ENU Compared with Recommended Dietary Allowances (RDAs)	Average nutrient availability per ENU as a percent of the RDAs, calculated for food energy, protein, and the seven micronutrients under consideration.
Households Attaining RDAs	Percentage of households whose availability of nutrients per ENU equals or exceeds the RDAs, calculated for food energy, protein, and the seven micronutrients under consideration.
Nutrient Densities	Nutrient availability per 1,000 kilocalories of food energy calculated for the seven micronutrients under consideration. Calculated by dividing the availability of each micronutrient by the availability of food energy.
Nutrient Availability per Dollar of Food Used at Home	Nutrient availability per dollar of food used at home calculated for protein and the seven micronutrients under consideration. It equals the availability of each nutrient divided by the total money value of food used at home (in dollars per week).
Food Energy from Protein, Carbohydrate, and Fat	The proportions of food energy derived from protein, carbohydrate, and fat.

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ained by multiplying the weekly money value of purchased

ood grocers, convenience stores, and specialty stores as

1 beverages that were eaten at restaurants, bars,  
ceeding the interview and the amount paid in the calendar  
school meals and for meals or snacks received at a day  
from the payment for the care). Converted to monthly

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sure of expenditures for food used at home.

**a. Household Size in AMEs**

Household size in AMEs adjusts household size for the ages and genders of the household members. The adjustment procedure weights each household member by the recommended dietary allowance (RDA) for that member for a given nutrient, typically, food energy, relative to the RDA for that nutrient for an adult male aged 25 to 50 years.<sup>10</sup> The sum of these weights gives household size in AMEs.

For example, consider the following household, with a male and female householder each aged 40 years, a boy aged 15 years, and a girl aged 12 years:

Household Member	RDA for Food Energy (Kilocalories)	Relative Need
Male, aged 40	2,900	1.00
Female, aged 40	2,200	0.76
Male, aged 15	3,000	1.03
Female, aged 12	2,200	<u>0.76</u>
Household size in adult male equivalents (AMEs)		3.55

The number of AMEs in this household, based on the relative needs of the household members for food energy, is 3.55.

**b. Household Size in ENUs**

Household size in ENUs adjusts household size for the ages and genders of the household members, as well as for the proportion of meals eaten from the household food supply and meals served to guests. The adjustment weights each household member by the RDA for that member for

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<sup>10</sup>We used the 1989 revised RDAs, which were determined by the National Research Council of the National Academy of Sciences (1989b). Pregnancy and lactation status are also taken into account in these recommendations and in the AME calculations.



a given nutrient, such as food energy, relative to the RDA for that nutrient for an adult male aged 25 to 50 years and by the proportion of meals eaten at home. It also adjusts for meals served to guests. The sum of these weights gives household size in ENUs.

Continuing with the previous example, assume that the male householder ate two-thirds of his weekly meals at home, and that the other household members ate all of their meals at home:

Household Member	Relative Need	Proportion of Meals Eaten at Home	Equivalent Nutrition Units
Male, aged 40	1.00	0.67	0.67
Female, aged 40	0.76	1.00	0.76
Male, aged 15	1.03	1.00	1.03
Female, aged 12	0.76	1.00	<u>0.76</u>
Household size in equivalent nutrition units (ENUs)			3.22

The household size in ENUs for this hypothetical household, based on the relative needs of the household members for food energy, is 3.22 persons.

## 2. Measures of Household Food Use

Food used at home (household food use) refers to all food and beverages used from the household food supply during the seven days preceding the interview (see Section III.A.1.b for a more complete description of this measure). We used the information obtained during the interview on the types, quantities, and prices of the foods that food stamp recipients used at home in order to calculate the following four measures of household food use: (1) the quantity (in pounds per week) of all food used at home and, separately, for 32 food groups, (2) the money value (in dollars per week) of all food used at home and, separately, for purchased and nonpurchased food used at home, (3) the money value of all food used at home, by food group, and (4) the share of the money value of all food used at home, by food group. We describe these measures in the next four subsections.

#### **a. Quantities of Food Used at Home**

For the analyses of the quantities of food used at home, we examined the average quantities of food used (in pounds per person per week) for all food used at home and separately for 32 food groups--the 31 food groups corresponding to the USDA's Thrifty Food Plan (TFP), plus alcoholic beverages. "Per person" in these analyses always refers to per-ENU.

#### **b. Money Value of Food Used at Home**

We obtained the money value of a particular food item used at home by a household by multiplying the quantity (in pounds) used of the food item by its unit price.<sup>11</sup> Food that was not purchased directly, but that was used by the household (such as food obtained through WIC vouchers, home-produced food, or food received as a gift or in-lieu of pay), was valued at the average price per pound that the households reporting its purchase and use paid for that food item. We obtained the total money value of food used at home (in dollars per week) by summing the money values of the individual food items.

We used several outcome measures for the analysis of the money value of food used at home. First, we examined the money value of purchased food used at home. This variable is of interest because it reflects expenditures for food used at home--the factor that the FSP directly affects. Second, because food received as gifts, food obtained through WIC vouchers, and food obtained from direct food-assistance programs are potential substitutes for purchased food, it is of interest to examine whether the demonstration had effects on nonpurchased food used at home. Third, we examined the value of all food used at home, that is, the sum of the previous two measures.

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<sup>11</sup>During the interviews, respondents were asked about the quantity of each food *purchased* and the total purchase price. We subsequently used this information to compute the unit price of each food purchased. We used the unit price to compute the money value of food *used*. As part of the editing that we performed to ensure as much accuracy as possible in the data set, food items for which the computed prices were very high or very low in relation to the mean price of a food item were examined manually, using the hard-copy instruments. In some instances, no apparent errors were identified. In other cases, errors were identified and corrected. The quantity of the food purchased was most often in need of revision.

For each of the three measures, we calculated the total for the household, as well as two versions scaled by household size--the AME and ENU measures of household size.<sup>12</sup> The money value of total food used at home per household is simply the total money value of food used from the household food supply. We obtained the money value of total food used at home per AME and per ENU by dividing the household's money value of total food used at home by household size in, respectively, AMEs and ENUs. The measures for purchased and nonpurchased food used at home were defined analogously.

Note that, of the three measures of the money value of food used at home, we believe the results based on measures scaled by ENU are the most useful. This measure accounts for family size and composition and, because it controls for any shifting of meals from at-home to away-from-home, or vice-versa, shows the effects of cash-out on total (purchased and nonpurchased) food used at home by those who use the home food supply. Essentially, the ENU measure of household size, by taking into account the percentages of meals eaten at home, provides the best measure of the dependency of household members on the home food supply.

### **c. Money Value of Food Used at Home, by Food Group**

We also present the mean values of the money value of food used per ENU, by food group (for the 31 food groups in the TFP plus alcoholic beverages). For any household, the money value of food used at home (in dollars per week) per ENU for each aggregated food group was obtained by summing the money values of the individual food items comprising the food group and dividing the result by household size in ENUs.

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<sup>12</sup>The ENU measure of household size that was used to compute scaled measures of the money value of food used at home was based on the recommended intake of *food energy* (National Research Council, 1989b).

#### **d. Share of Money Value of Food Used at Home, by Food Group**

The *share of money value of food used at home, by food group*, is the percentage of the total money value of food used by a household from its home food supply that is accounted for by each of the 31 TFP food groups plus alcoholic beverages. When calculating mean shares, we have used averages of individual food stamp household shares for each food group. For purposes of illustration, an average expenditure share for check households for high-nutrient vegetables equalling 3.50 means that, for the average check household, of every dollar spent per week for food used at home, an average of 3.5 cents was devoted to high-nutrient vegetables.

### **3. Availability of Nutrients from Food Used at Home**

When examining the effects of cash-out on the availability of nutrients from food used at home, we considered two types of nutrients: (1) *macronutrients*--protein, fat, and carbohydrate--which are the principal sources of food energy,<sup>13</sup> and (2) *micronutrients*--vitamins, minerals, and trace elements --which are essential to the proper growth and maintenance of the human body.

The survey obtained data on food used by households, but not on food eaten by household members; consequently, the only nutrient measures that we can compute on the basis of the survey data are measures of nutrient availability. In this study, *nutrient availability* is defined as the nutrients available from all food used by a household from its home food supply during the seven-day period preceding the interview.<sup>14</sup> Thus, for example, we computed a household's availability of calcium by multiplying the calcium content per pound of each food item by the number of pounds used of

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<sup>13</sup>Alcohol (ethanol) is the only other significant source of food energy. The survey data for this study show that alcohol provided only about 0.1 percent of the energy obtained by food stamp households in Alabama from food used at home. Consequently, we have omitted alcohol from the analysis of food energy and its sources that is presented in Chapter IV.

<sup>14</sup>*Nutrient intake* is defined as the nutrients provided by foods actually eaten by household members and guests.

each food item and summing across the products across all food items. We derived the availability of food energy and other nutrients from the household food supply analogously.

In this study, most measures of nutrient availability are reported on a per-ENU basis.<sup>15</sup> Thus, continuing with the example, the availability of calcium from food used at home per ENU equals the availability of calcium in the food used by a household from its home food supply divided by the number of ENUs who draw on the household's home food supply for their meals, taking into account the proportion of meals consumed from the home food supply and the number of meals served to guests. When transformed in this way, the measure of nutrient availability can, subject to the qualifications given in the following section, be meaningfully compared with the RDA for an adult male, thus permitting an assessment of the *relative* nutritional adequacy across population groups of food used from the home food supply.

In the analyses of nutrient availability presented in Chapter IV, we calculate the mean values of seven measures. These measures are:

1. Availability of food energy and protein per ENU as a percent of the RDA
2. Percentages of households for which the availability per ENU of food energy and of protein equals or exceeds the RDA
3. The proportions of food energy derived from protein, carbohydrate, and fat
4. Nutrient availability per 1,000 kilocalories of food energy (calculated for the seven micronutrients under consideration)
5. Nutrient availability per ENU as a percent of the RDA (calculated for the seven micronutrients under consideration)

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<sup>15</sup>For each nutrient considered in this study, we have computed a nutrient-specific measure of household size in ENUs. This measure of household size incorporates adjustments for: (1) the need of each household member for the nutrient in question, as indicated by his or her RDA for that nutrient, (2) the proportion of each member's meals that is eaten at home, and (3) meals served to guests. See the discussion in Section III.C.1 for more details. It should be noted that, for analysis of nutrient outcomes, the ENU measures used are specific to each nutrient. However, for analysis of dollar-denominated variables, the ENUs for food energy are used.

6. Percentages of households for which the availability per ENU of each of the seven selected micronutrients equals or exceeds the RDA
7. Nutrient availability per dollar of food used at home (calculated for protein and for the seven micronutrients under consideration)

The third and seventh measures require further discussion. Examining nutrient availability per unit of food energy is of interest because it provides a measure of the average nutrient content, or *nutrient density*, of food used. This measure can help us to understand reasons for observed changes in other nutrient outcome variables. For instance, suppose that cash-out was found to reduce the consumption of food energy. It would be of interest to determine whether the consumption of key nutrients had been reduced concomitantly, or, alternatively, whether households had avoided such reductions by switching to foods having higher nutrient densities.

When calculating, for each household, the nutrient availability per 1,000 kilocalories of food energy for the seven micronutrients, we divided the availability of each micronutrient per household by the availability of food energy. The mean values of these ratios equal the averages of individual food stamp household ratios for each micronutrient.

Similar considerations apply to the measure of nutrient availability per dollar of food used at home, which provides a measure of how many nutrients the households are receiving for their expenditures for food. To the extent that expenditures for food change, it is of interest to examine whether households increase the nutrient availability per dollar of food so that the decrease in expenditures is not fully reflected by a decrease in nutrients.

Nutrient availability per dollar of food used at home for protein and for each micronutrient under consideration equals the availability of each nutrient in a respondent household divided by the total money value of food used at home by that household. The mean values of these ratios equal the averages of the individual food stamp household ratios for each nutrient.

**a. Limitations of RDAs and Nutrient Availability in Assessing Nutritional Adequacy**

Many of the measures of nutrient availability used in this study entail either a comparison between the sample mean availability of a nutrient per ENU and the RDA for an adult male or a determination of the percentage of sample households for whom the availability of a nutrient per ENU equals or exceeds the RDA. It is important at the outset to note some limitations of using RDAs as standards for evaluating the nutritional adequacy of food used by households, as well as of using data on nutrient availability, rather than on nutrient intake.

RDAs for selected nutrients are established for demographic groups that are defined by age, gender, and pregnancy and lactation status. The RDA of a particular demographic group for a given nutrient reflects the average requirement of the members of the group for the *intake* of that nutrient, as well as the variability in their requirements. To accommodate that variability, for all nutrients except food energy, the RDA exceeds the mean requirement by a large margin.<sup>16</sup> Therefore, if a demographic group's mean intake of a nutrient equals or exceeds the relatively high standard of the RDA, the probability of inadequate intake is quite low for members of that group. Furthermore, an individual whose intake of a nutrient other than food energy is less than the RDA for that nutrient might not be at nutritional risk, because the RDA exceeds the nutritional requirements of most individuals.

At the same time, the finding that a nutrient is available in an amount that equals or exceeds the RDA, either on average for all households or for specific households, does not necessarily mean that the supply of that nutrient is sufficient to permit the members of those households to have intakes of the nutrient that equal or exceed the RDA. Not all of the food used by a household from its home food supply is eaten by members or guests of the household; some is lost, wasted, or fed to pets. To the extent that such diversion of food occurs, the availability of nutrients from food used at

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<sup>16</sup>"The RDA for energy . . . reflects the mean population requirement for each group, since consumption of energy at a level intended to cover the variation in energy needs among individuals could lead to obesity in most persons" (National Research Council, 1989, page 2).

at home will exceed the sum across all household members and guests of the intake of nutrients from that food. Thus, the *availability* of nutrients from the household food supply is likely to overstate the *intake* of nutrients by household members.

Consequently, the statistics on the availability of nutrients relative to the RDAs that we present in Chapter IV and that are based on the measures described in this chapter should be used to make only *relative* comparisons between check and coupon recipients of the nutritional adequacy of food used from the home food supply. A finding that the mean availability of a given nutrient equals or exceeds the RDA by a greater margin for one of the groups than for the other should be interpreted as indicating that the group for which the margin is larger is at less nutritional risk than the other group.<sup>17</sup> Although availability below the RDA for a nutrient does not necessarily imply dietary inadequacy, the risk of dietary inadequacy increases as the mean availability of a nutrient falls further below the RDA. The finding that the proportion of households for which the availability of a nutrient equals or exceeds the RDA is greater for one group than for the other should also be interpreted in a relativistic fashion. The reader is cautioned to avoid drawing absolute conclusions from these findings about the number or proportion of coupon or check households that are at nutritional risk.

#### **4. Food and Nonfood Expenditures**

This section describes the four measures used to assess the impact of cash-out on food and nonfood expenditures. The measures are: (1) expenditures for food used at home, (2) expenditures for food used away from home, (3) total expenditures for food, and (4) food and nonfood expenditure shares.

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<sup>17</sup>In this context, "nutritional risk" is the likelihood of having insufficient nutrients available from food used from the household food supply to maintain good health.



#### **a. Expenditures for Food Used at Home**

The principal measure of expenditures for food used at home that we analyze in this report is the *money value of purchased food used at home*, as defined in Section 2.b. of this chapter. This measure is based on the seven-day accounting of each individual purchased food item that was used from the home food supply (that is, the use of purchased food during the seven-day recall period).<sup>18</sup> We computed the money value of each reported food item that was purchased as the quantity used multiplied by the unit price. We obtained the total money value of purchased food used at home per week by summing the money value over all of the purchased food items used. This figure was converted to a monthly figure by multiplying the per-week amount by 4.3 weeks.

Note that the monthly value of purchased food used at home as defined in the previous paragraph is only an *indirect* measure of actual expenditures in any given month. It differs from the true measure of expenditures for food used at home per month in that: (1) foods enter the measure as they are used, rather than as they are purchased by the household, and (2) the measure is based on a seven-day accounting period, rather than on a monthly accounting period. However, it is reasonable to assume that, on average, actual expenditures for food used at home and the current measure, which is based on the money value of purchased food used at home, correspond closely.

A second measure of food expenditures was also available in the data set. This measure, obtained during the household screening interview, was based on household reports of the total amounts of money spent by household members for food at various types of stores. This measure differs substantially from the first measure; the mean of expenditures as estimated from the screener

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<sup>18</sup>It is useful to analyze essentially the same variable in two different parts of the analysis, because the information is interpreted differently in the different components of the analysis and because it is aggregated differently with other variables. For instance, when interpreting the variable as a measure of the money value of food used, it is reasonable to combine it with the money value of *nonpurchased* food used at home in order to obtain an indicator of the money value of overall home food use. However, when interpreting the variable as a measure of food expenditures, it is reasonable to combine it with a measure of food purchased outside of the home in order to obtain an overall indicator of expenditures for food.

questions is approximately 17 percent lower than the mean that is based on the detailed food-use data.

To assess the potential accuracy of the two measures of expenditures, we have compared our expenditures estimates with those obtained in two other national-level data sources for information on food expenditures: (1) the 1988-1989 Consumer Expenditure Survey, conducted for the U.S. Department of Labor, Bureau of Labor Statistics; and (2) the 1979-1980 low-income supplement to the Nationwide Food Consumption Survey, conducted for the USDA, Human Nutrition Information Service. As reported in Appendix H, the results of this investigation were ambiguous--one external source was closer to the main survey data than to the screener data, whereas the other external source was closer to the screener data.

We have also considered differences in the questions related to food expenditures that were asked in the main questionnaire and in the screener. A priori, it seems likely that we obtained more accurate information from the very detailed probing sequences in the main questionnaire about food used than from the summary questions in the screener about overall monthly expenditures at various types of stores.

On balance, we believe that the data from the main household survey are likely to be more accurate. Therefore, we base the analysis in the main text of the report on this information. However, in Appendix H, we present results that are based on the alternative measure.

#### **b. Expenditures for Food Used Away from Home**

The measure of monthly expenditures for food purchased and consumed away from home, *monthly expenditures for food used away from home*, is based on information from the main questionnaire. This measure includes the household's reported total expenditures (including any applicable sales taxes and tips) for meals, snacks, and beverages that were eaten at restaurants, bars,

cafeterias, cafes, and fast food places during the seven days preceding the interview.<sup>19</sup> It also includes the amount paid in the calendar month preceding the interview for reduced-price or full-price school meals and for meals or snacks received at a day care home or center (if the payment for the food was separate from the payment for the care).

### **c. Total Expenditures for Food**

We calculated *total monthly expenditures for food* by summing the money value of purchased food used at home and expenditures for food used away from home. It is important to point out several limitations associated with this measure of total food expenditures. First, the survey methodologies used to measure expenditures for food used at home and for food used away from home differ. The measure of expenditures for food used at home is based on a seven-day assisted recall of each purchased food item used from the home food supply, whereas the measure of expenditures for food used away from home is based on a recall of the aggregate household expenditures for food used away from home during the seven days preceding the household interview. Second, the measure of expenditures on food used away from home includes nonfood costs, including sales taxes and service charges, such as tips, whereas the measure of expenditures on food used at home is based on the price of purchased food without sales taxes and service charges. Therefore, because of the differences, aggregation of the two measures (expenditures for food used at home and expenditures for food used away from home) is somewhat problematic.

Despite these measurement problems, we have conducted a limited amount of analysis of total expenditures for food. Readers should keep in mind the limitations of these measures.

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<sup>19</sup>Total expenditures for the seven days were multiplied by 4.3 weeks in order to convert the seven-day amount to a monthly amount.

#### **d. Food and Nonfood Expenditure Shares**

In the household survey, households were asked to recall expenditures made during the previous month for the following nine broad categories of nonfood items: (1) housing, (2) utilities, (3) medical, (4) transportation, (5) clothing, (6) education, (7) dependent care, (8) recreation, and (9) personal items. These data were converted into *expenditure shares*. An expenditure share is the proportion of all reported expenditures allocated to a specific budget category (for example, a household's expenditure for clothing divided by the total dollar amount of all of its reported expenditures). We computed expenditure shares for total food (and separately for its components

This section presents descriptive statistics for the sample of 2,386 households. (The characteristics of the smaller sample used in the food-based analysis are virtually identical to those of this larger sample.)

### **1. Demographic Characteristics of Check and Coupon Households**

This section examines the demographic characteristics of the check and coupon households in the survey sample, such as household size and composition. It also examines the demographic characteristics of the "sampled person" in each of those households.<sup>22</sup> As discussed, check and coupon households and sampled persons were similar along all of the characteristics examined.

Check households contained an average of 2.98 persons per household, whereas coupon households contained an average of 2.91 persons (Table III.2). When we rescaled household size to account for differences in household composition and in the number of meals eaten at home, the sizes of the check and coupon households were still very similar.

About 25 percent of check households and 24 percent of coupon households contained an elderly person. Sixty percent of check households and 61 percent of coupon households contained children. In both samples, a majority of households with children were headed by a single parent. About 74 percent of sampled check recipients were female, and 21 percent were married. About 74 percent of sampled coupon recipients were female, and 19 percent were married. These differences are not statistically significant.

About 24 percent of sampled persons in check households and 25 percent in coupon households were employed at the time of the interview. Roughly 40 percent of sampled persons in check households were less than 35 years of age, as were 39 percent in coupon households. About 28 percent of sampled persons in check households and 27 percent in coupon households had completed

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<sup>22</sup>The "sampled person" is the person in whose name the food stamp case is maintained. Most the demographic information was collected in the survey only for the sampled person; only age of and relationship to the sampled person were collected for all household members.

TABLE III.2  
DEMOGRAPHIC CHARACTERISTICS OF CHECK AND COUPON HOUSEHOLDS

	Percentage		Difference in Percentages		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Composition of the Food Consumption Unit</b>					
Persons in Food Consumption Unit	2.98	2.91	0.07	2.58	0.97
Food Consumption Unit in Adult Male Equivalents	2.15	2.12	0.03	1.49	0.56
Food Consumption Unit in Equivalent Nutrition Units	1.87	1.83	0.04	2.35	0.87
Contains Elderly (percent)	25.34	23.78	1.56	6.54	0.88
Contains Children (percent)	59.52	61.36	-1.84	-3.00	0.92
Single parent (percent)	78.42	79.22	-0.80	-1.01	0.37
Two parents (percent)	21.58	20.78	0.80	3.86	0.37
<b>Characteristics of the Sampled Person (Percentage of Households)</b>					
Female	74.18	73.65	0.53	0.72	0.30
Married	21.12	18.92	2.20	11.60	1.34
Employed	23.51	25.38	-1.87	-7.37	1.06
Less than 35 Years Old	39.92	38.99	0.93	2.38	0.46
<b>Education</b>					
Did not complete elementary school	27.73	27.41	0.32	1.17	0.17
Completed elementary school	30.92	32.01	-1.09	-3.41	0.57
Completed high school	41.35	40.32	1.03	2.57	0.51
<b>Race and Ethnicity</b>					
Black (not Hispanic)	68.05	69.41	-1.36	-1.96	0.72
White (not Hispanic)	31.31	30.24	1.07	3.56	0.57
Other	0.64	0.35	0.29	80.24	0.99
Sample Size	1,255	1,131			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Two-tailed statistical tests were performed on all check-coupon differences shown in this table; none was statistically significant.

no more than eight grades of school. Forty-one percent of check households had completed high school, compared with 40 percent of coupon households.

Approximately 68 percent of sampled persons in check households and 69 percent in coupon households were black. Non-Hispanic whites were the only other racial/ethnic group significantly represented in the sample.

## **2. Economic Characteristics of Check and Coupon Households**

This section compares the economic situations of check households and coupon households. As with the demographic characteristics, the economic characteristics of the samples of check and coupon households were similar.

During the interview, we asked respondents whether the adults in the households had received income during the previous month from each of 17 different sources, including earnings from a job or self-employment, several types of retirement income, and benefits from a number of government transfer programs. When an income source was reported, the respondent was asked about the amount of income received from that source during the month. Respondents were also asked to report the amount of their food stamp benefits. To obtain the total cash income for the FCU, we summed the amounts of cash income from all sources for all of the individuals in the FCU.

To increase the accuracy of the data, we replaced the self-reported amounts for both Aid to Families with Dependent Children (AFDC) and food stamp benefits with the amounts obtained from the administrative records of the FSP for the interview month. For households containing more than one FCU or AFDC unit, we made the replacement only for the "primary" unit, that is, for the FCU that was sampled to participate in the study. Therefore, the total AFDC benefit for an FCU might be the sum of one "official" amount and one or more self-reported amounts. The same is true for the total food stamp benefit amount.

Table III.3 compares the economic circumstances of check and coupon households. The total monthly cash income for the FCU averaged \$446 for check recipients and \$441 for coupon recipients. Almost 29 percent of check households and more than 30 percent of coupon households received wage and salary earnings, with check recipients having somewhat higher average earnings. However, none of these differences is statistically significant.

Almost 26 percent of both groups of households received AFDC benefits. Check recipients received an average monthly AFDC benefit of \$128, and coupon recipients received an average of \$121, a difference that is statistically significant at the 90 percent confidence level. Thirty-nine percent of check households and 38 percent of coupon households received other forms of public assistance (Supplemental Security Income, General Assistance, and Housing Assistance).

The average amount of the food stamp benefit was virtually identical in the two samples--about \$169.



TABLE III.3  
ECONOMIC CHARACTERISTICS OF CHECK AND COUPON HOUSEHOLDS

	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Monthly Cash Income	\$445.58	\$441.35	4.23	0.96	0.31
Percent Receiving Earned Income	28.53	30.33	-1.80	-5.94	0.96
Amount of Earned Income (Recipients Only)	\$544.53	\$513.86	30.67	5.97	1.15
Percent Receiving AFDC	25.50	25.91	-0.41	-1.58	0.23
Amount of AFDC Benefits (Recipients Only)	\$128.26	\$121.27	6.99	5.76	1.79 *
Percent Receiving Other Public Assistance	38.80	38.02	0.78	2.07	0.39
Amount of Other Public Assistance Benefits (Recipients Only)	\$216.82	\$225.72	8.90	-3.94	0.78
Food Consumption Unit Monthly Food Stamp Benefits	\$169.27	\$168.80	0.47	0.28	0.09
Ratio of Monthly Food Stamp Benefit to Monthly Cash Income Plus the Food Stamp Benefit <sup>a</sup> (Percent)	27.53	27.66	-0.13	-0.49	NA
Percent Paying Rent	53.78	55.17	-1.39	-2.51	0.68
Amount of Rent Paid (Renters Only)	\$126.65	\$120.83	5.82	4.82	1.24
Sample Size	1,255	1,131			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Monthly cash income figures exclude cash Food Stamp Program benefits.

Two-tailed statistical tests were performed on all check-coupon differences shown in this table.

<sup>a</sup>Calculated as the sum of all food stamp benefits in the sample divided by the sum of all food stamp benefits plus income in the sample.

AFDC = Aid to Families with Dependent Children; NA = not applicable

\*Statistically significant at the 90 percent confidence level, two-tailed test.

#### **IV. THE EFFECTS OF CASH-OUT ON HOUSEHOLD FOOD USE, NUTRIENT AVAILABILITY, AND PERCEPTIONS OF FOOD ADEQUACY**

A central issue in the evaluation of the Alabama Food Stamp Cash-Out Demonstration (and in the other cash-out studies) is whether converting the form of the benefit from food stamp coupons to checks reduces household food use and the nutrients provided by food used at home. In this chapter, we use data from the survey of check and coupon households to assess the impact of cash-out on household food use, nutrient availability, and perceptions of food adequacy in Alabama. The household survey obtained detailed data from the respondents on the types, quantities, and prices of foods used at home during the week preceding the interview; on the respondents' perceptions of the adequacy of their home food supplies; and on the respondents' uses of other program and nonprogram sources of food. To analyze the impact of cash-out on household food use, nutrient availability, and perceptions of food adequacy, we present sample mean values of outcome measures for check households and coupon households separately and conduct formal difference-of-means tests to compare outcomes.

The chapter is organized into three sections. Section A describes the impact of cash-out on the money value, kinds, and quantities of food used at home. Section B discusses the impact of cash-out on the availability of nutrients from food used at home. Section C describes the impact of cash-out on the respondents' perceptions of the adequacy of their home food supplies.

##### **A. THE MONEY VALUE AND TYPES OF FOOD USED AT HOME**

Households in the Food Stamp Program (FSP) can use check benefits to purchase any good or service. Therefore, converting the benefit form from coupons to checks might induce these households to purchase less food, thereby leading to reduced levels of nutrition among the households' members. Such an effect would undermine a major objective of the FSP. The Alabama household survey was designed to provide information on the impact of cash-out on food use,

especially on the money values of both purchased and nonpurchased food used at home.<sup>1</sup> This section uses information from the survey to investigate the effects of cash-out on the money value of food used at home and on the kinds and quantities of food used.<sup>2</sup>

## **1. The Money Value of Food Used at Home**

We begin by discussing the impact of cash-out on the money values of purchased and nonpurchased food used at home during the seven days preceding the interview. In addition, we discuss the impact of cash-out on the sum of those values, that is, on the money value of all food used at home. We use three measures in our discussion. In Section III.A.1.a, to discuss the findings, we use the *money value of the food used at home per household*, which is simply the total money value of the food used from the household food supply. In Section III.A.1.b, we examine two measures that adjust the money value of food used at home for family size and composition: (1) the *money value of food used at home per adult male equivalent (AME)*, and (2) the *money value of food used at home per equivalent nutrition unit (ENU)*.<sup>3</sup>

To summarize the findings, the analysis of the money value of food used by check households and coupon households indicates that cash-out did not lead to a reduction in the money value of food used at home. This finding is consistent for all three measures of the money value of food used at home. The analysis also indicates that check and coupon households were essentially alike with

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<sup>1</sup>Nonpurchased food includes home-produced food (such as that obtained by gardening, hunting, or fishing), food obtained from a food bank or a government commodity distribution program, food obtained by redeeming a Special Supplemental Food Program for Women, Infants, and Children (WIC) voucher, and food received as a gift or as payment for work. In the final section of this chapter, we present findings from the household survey on the reliance of check recipients on food banks, surplus commodities, and gift/pay food.

<sup>2</sup>In this evaluation, we also assessed the impact of cash-out on nonfood consumption behavior. We present the results of that assessment in Section A of Chapter V.

<sup>3</sup>See Chapter III, Section C.2, for descriptions of the unscaled and scaled measures of the money value of food used at home.

respect to the money value of purchased food, of nonpurchased food, and of all food used.<sup>4</sup> Our analysis reveals no differences between urban and rural households with respect to the effect of cash-out on the money value of food used at home.

**a. Money Value of Food Used at Home per Household**

The cash-out of food stamp benefits in Alabama did not lead to a reduction in the money value of food used at home per household. Table IV.1 shows that both check households and coupon households used about \$55 worth of purchased food at home per week, and a little less than \$5 worth of nonpurchased food at home per week. Therefore, it follows that, for both check households and coupon households, the money value of all food used at home (purchased food plus nonpurchased food) was about \$60 per week. The difference between the two groups is quite small (only 1 percent), and not statistically significant.

The effect of cash-out on the money value of food used at home did not differ for urban and rural households. Appendix Tables J.1.A and J.1.B, which have the same format as Table IV.1, present the mean values of the various measures of the money value of food used at home separately for urban and rural households. Those tables show that the money value of nonpurchased food (including home-produced food) used at home by rural households exceeded that used by urban households by about 60 percent. However, the tables also show that, for both groups, regardless of the measure of the money value of food used at home, the estimated effects of cash-out were small and not statistically significant.

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<sup>4</sup>When assessing these findings, note that they are based on measures of food use derived from detailed survey information on the foods used by households during the seven days preceding the interview. The survey data set also contains a measure of food expenditures that is based on respondent estimates of the amounts of money spent at various types of food stores during the month before the interview. As reported in Chapter V and Appendix H, this measure does not show that cash-out results in any decrease in household food expenditures. We have focused most of the analysis on the expenditures measure derived from the detailed recall of food use; for reasons discussed in detail in Chapter V and Appendix H, we believe that this measure is the more accurate measure of household food expenditures.

TABLE IV.1  
MONEY VALUE OF FOOD USED AT HOME  
(In Dollars)

	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Money Value of Food Used at Home</b>					
Purchased food	55.46	54.85	0.61	1.13	0.43
Nonpurchased food	4.84	4.69	0.15	3.19	0.38
All food used at home	60.31	59.54	0.77	1.29	0.50
<b>Money Value of Food Used at Home per ENU</b>					
Purchased food	33.43	33.66	-0.23	-0.69	0.31
Nonpurchased food	2.82	2.75	0.07	2.55	0.29
All food used at home	36.25	36.41	-0.16	-0.44	0.21
<b>Money Value of Food Used at Home per AME</b>					
Purchased food	29.43	29.50	-0.07	-0.27	0.12
Nonpurchased food	2.63	2.46	0.17	6.63	0.74
All food used at home	32.05	31.97	0.08	0.27	0.12
<b>Sample Size</b>	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for (1) lower money value of purchased food and all food used at home by check recipients and (2) greater money value of nonpurchased food used at home by check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher

Appendix Table G.1 presents median values of the variables shown in this table. Appendix Table I.1 presents standard errors of the estimates shown in this table.

ENU = equivalent nutrition unit; AME = adult male equivalent.

## **b. Scaled Measures of the Money Value of Food Used at Home**

The unscaled measure of the money value of food used at home per household reflects the influence on the use of food at home of both the size of the household and its age-gender composition. It also reflects the influence of the proportion of meals that are consumed from the household food supply. We control for these factors in this section, in which we report findings that are based on AME- and ENU-scaled measures of the money value of food used at home. The former measure controls for household size and composition, whereas the latter controls for household size and composition, as well as for the proportion of meals eaten from the home food supply.

Table IV.1 shows that the money value of both purchased and nonpurchased food used at home per ENU was virtually the same for check and coupon households. With respect to all food used at home (purchased food plus nonpurchased food), check households used an average of \$36.25 per week per ENU, which was only 0.4 percent less than the corresponding amount for coupon households (\$36.41). None of the check-coupon differences in the money value of food used at home per ENU is statistically significant at conventional confidence levels.<sup>5,6</sup>

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<sup>5</sup>For the money value of food used per ENU and for selected measures of nutrient availability discussed later in this chapter, we used "trimmed" means of the variables to conduct alternative "robust" tests for check-coupon differences. To conduct these tests, we first excluded from our calculations the 1 percent of check and coupon cases having the highest values and the 1 percent having the lowest values of the variable in question. We subsequently increased the trimming to 5 percent from each tail of the distribution. The purpose of the trimming was to make our statistical inferences less sensitive to cases having extreme values of food use, as such values might have been misreported or miscoded. With the 1 percent trimming, the finding reported in this chapter, that the differences in means between check and coupon households were very small, persisted in the trimmed means. In addition, statistical tests, whether based on trimmed or untrimmed means, showed that none of the check-coupon differences is significant. The increase in trimming from 1 percent to 5 percent of cases in each tail had no effect.

<sup>6</sup>As with the simple-difference-in-means estimates, the regression-adjusted estimates of the effect of cash-out on the money value of purchased food used at home per ENU, of nonpurchased food used at home per ENU, and of all food used at home per ENU are very small in magnitude and are not statistically significant. The regression-adjusted estimates of the check-coupon differences in these measures of household food use range from \$0.07 to \$0.14, and the associated t-statistics range from 0.09 to 0.20. See Appendix Tables E.3 through E.5 for additional details on these estimates. See Chapter III, Section B.1.b, for an explanation of the analysis of regression-adjusted mean values.

The findings that are based on the AME-scaled measure of food use are essentially the same as those that are based on the ENU-scaled measure. We find only very small differences between check and coupon households in the average money values of purchased food, nonpurchased food, and all food used at home per AME per week. None of those differences is statistically significant.

Cash-out could conceivably lead food stamp households that are in the lower tail of the food-use distribution to reduce their use of food, while having little effect on the overall average use of food. Such an outcome would be of great concern to policymakers, as the affected households would be those at greatest nutritional risk. To examine this issue, we compared the cumulative distributions of the money value of food used at home per ENU for check households and coupon households. This comparison showed that cash-out had virtually no effect on the use of food at home per ENU by households that are in the lower end of the food-use distribution. As Appendix Figure G.1 shows, the cumulative distributions of the money value of food used at home per ENU are quite similar for check and coupon households that are in the first quartile of those distributions. The cumulative distributions are also very similar for households in the three higher quartiles of food use.<sup>7</sup>

**c. Money Value of Purchased Food Used as a Percentage of the Food Stamp Benefit Amount**

We calculated the money value of purchased food used at home as a percentage of the food stamp benefit. If the money value of purchased food used by a household does not exceed the value of its food stamp benefit, this measure is less than or equal to 100 percent. Under this condition, a coupon household might prefer to reduce its food consumption and to increase its nonfood consumption; however, it is prevented from doing so by the form of the food stamp benefit. Such a household is said to be "constrained" in its consumption behavior by the coupon form of its food stamp benefit. A constrained household is likely to respond to food stamp cash-out by diverting some

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<sup>7</sup>Appendix Table G.1 also provides the median values for the money value of food used per ENU and for the other variables shown in Table IV.1.

portion of its food stamp benefit away from the purchase of food and toward the purchase of nonfood items.

The concept of "constraint" can be clarified by considering an unconstrained household. The consumption behavior of a coupon household that purchases food having a money value in excess of its food stamp benefit amount (because the household uses some of its cash income to purchase food) is said to be "unconstrained" by the form of the food stamp benefit. Even in the absence of cash-out, such a household could reduce its consumption of food and increase its consumption of nonfood items, if it wished, by cutting back on its cash purchases of food and using the money that it saved to increase its nonfood purchases. Given that option, we would not expect an unconstrained household to change its consumption behavior in response to cash-out.

We would expect constrained households to alter their consumption behavior in response to the increased flexibility afforded by check benefits, but would expect the consumption behavior of unconstrained households to remain unchanged. Therefore, for coupon households, the money value of purchased food used as a percentage of the food stamp benefit for coupon households is, in principle, an indicator of the size of the impact that cash-out might have on food consumption and nutrient availability.

We computed the percentage of coupon households for which the money value of purchased food used at home was (1) less than 100 percent of the food stamp benefit, (2) between 101 percent and 110 percent of the food stamp benefit, and (3) greater than 110 percent of the food stamp benefit. To allow for errors in the reporting of food use, we classified coupon households having a money value of purchased food used at home that was less than or equal to 110 percent of the food stamp benefit as possibly being constrained by the form of their benefit.

Table IV.2 shows that 67 percent of coupon households had a money value of purchased food used at home that was greater than 110 percent of their food stamp benefit; thus, 33 percent of the coupon households were possibly constrained by the form of the benefit. This percentage is more



TABLE IV.2

MONEY VALUE OF PURCHASED FOOD USED AT HOME AS A  
PERCENTAGE OF THE HOUSEHOLD'S FOOD STAMP BENEFIT

Comparison of Weekly Food Stamp Benefit with Money Value of Purchased Food Used at Home	Percent of Coupon Recipients
Money Value of Purchased Food Used at Home is:	
≤100 percent of food stamp benefit <sup>a</sup>	25.83
101 percent to 110 percent of food stamp benefit <sup>a</sup>	6.94
>110 percent of food stamp benefit	67.22
Sample Size	1,080

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

<sup>a</sup>These households are potentially constrained by the issuance of food stamp benefits as coupons.

than twice the percentage of constrained coupon recipients nationwide, as estimated by Senauer and Young (1986). Because food stamp recipients in Alabama have relatively low cash incomes, the high proportion of potentially constrained coupon recipients in our sample was to be expected. Given that high proportion, the virtually complete absence of evidence from this evaluation of any effect of cash-out on food consumption is surprising.

## **2. Kinds of Food Used at Home**

This section investigates whether, despite having little impact on the money value of food used at home, food stamp cash-out might have affected the use of particular *kinds* of food. We base our analysis on 32 food groups, 31 of which are defined in the Thrifty Food Plan (TFP) of the U.S. Department of Agriculture (USDA). The TFP is the least costly of the four family food plans of the USDA (U.S. Department of Agriculture, Human Nutrition Information Service, 1983). The monthly cost of purchasing the TFP foods is the basis for the food-stamp allotment standard. The one non-TFP food group that we consider is alcoholic beverages. Although food stamp regulations prohibit

**a. Quantity of Food Used, by Food Group**

For all foods combined, both check and coupon recipients reported using about 44.5 pounds of food per ENU per week. Table IV.3 lists the 31 TFP food groups plus alcoholic beverages and shows that the food-quantity response to cash-out varied somewhat across the groups.

Check households reported using fewer pounds of most types of *meat and alternatives* than did coupon households. Although several of these check-coupon differences are large in absolute terms, none exceeds 8 percent when measured relative to the use reported by coupon recipients. However, focusing on relative differences reveals some check-coupon variations in the quantity of food used. Compared with coupon recipients, check recipients reported using substantially less *whole-grain/high-fiber flour, meal, rice, and pasta* (14 percent less), *coffee and tea* (15 percent less), and *alcohol* (38 percent less). Of the 14 food categories for which check recipients reported using fewer pounds of food than did coupon recipients, the only statistically significant difference is in the *coffee and tea* category. For most groups of foods other than meat and alternatives and beverages, check recipients reported using slightly more food than did coupon recipients. Of the 18 food groups for which reported use by check recipients exceeded that by coupon recipients, only the differences for *grain mixtures* (24 percent) and *nuts and peanut butter* (21 percent) are statistically significant.

**b. Money Value of Food Used, by Food Group**

In Table IV.4, we present the estimated effects of cash-out on the money value of food used at home, by food group. The basic pattern of these effects is similar to that obtained when we used the food-quantity outcome measure. The estimated reductions in money values were concentrated among *meat and alternatives* and in the various categories of beverages; however, none of those estimates is statistically significant. For most of the other categories of foods, we estimate that the money values increased as a consequence of cash-out, although those estimated increases are generally small and statistically insignificant. Relative to coupon recipients, check recipients reported significantly

TABLE IV.3  
QUANTITY OF FOOD USED AT HOME, BY FOOD GROUP  
(In Pounds per Week per ENU)

Food Group	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Vegetables, Fruit</b>					
Potatoes	1.41	1.42	-0.01	-0.80	0.14
High-nutrient vegetables	2.48	2.44	0.04	1.67	0.32
Other vegetables	2.46	2.43	0.03	1.37	0.33
Mixtures, mostly vegetables; condiments	0.39	0.39	0.00	0.45	0.07
Vitamin-C-rich fruit	1.80	1.67	0.13	7.72	1.12
Other fruit	3.96	3.86	0.10	2.56	0.31
<b>Grain Products</b>					
Whole-grain/high-fiber breakfast cereals	0.27	0.28	-0.01	-3.63	0.49
Other breakfast cereals	0.33	0.32	0.01	2.82	0.46
Whole-grain/high-fiber flour, meal, rice, pasta	0.25	0.29	-0.04	-13.59	1.30
Other flour, meal, rice, pasta	1.85	1.79	0.06	2.85	0.67
Whole-grain/high-fiber bread	0.14	0.13	0.01	4.50	0.33
Other bread	1.32	1.31	0.01	1.07	0.30
Bakery products, not bread	0.80	0.77	0.03	4.25	0.87
Grain mixtures	0.33	0.27	0.06	23.82	2.34 **
<b>Milk, Cheese, Cream</b>					
Milk, yogurt	6.55	6.16	0.39	6.26	1.61
Cheese	0.34	0.32	0.02	7.90	1.35
Cream, milk mixtures, mostly milk	0.63	0.59	0.04	7.06	0.84
<b>Meat and Alternatives</b>					
Lower-cost red meats, variety meats	2.42	2.53	-0.11	-4.43	1.06
Higher-cost red meats, variety meats	1.42	1.52	-0.10	-6.85	1.23
Poultry	2.45	2.46	-0.01	-0.50	0.12
Fish, shellfish	0.82	0.83	-0.01	-0.95	0.12
Bacon, sausage, luncheon meats	1.82	1.90	-0.08	-4.22	1.14
Eggs	0.90	0.93	-0.03	-4.23	1.34
Dry beans, peas, lentils	0.59	0.54	0.05	9.72	1.45
Mixtures, mostly meat, poultry, fish, egg, legume	0.44	0.47	-0.03	-5.08	0.55
Nuts, peanut butter	0.17	0.14	0.03	21.29	2.25 **
<b>Other Foods</b>					
Fats, oils	1.24	1.23	0.01	1.15	0.30
Sugar, sweets	1.58	1.49	0.09	6.21	1.44
Seasonings	0.00	0.00	0.00	-43.61	0.47
Soft drinks, punches, ades	5.05	5.41	-0.36	-6.69	1.42
Coffee, tea	0.14	0.16	-0.02	-15.23	2.03 **
Alcohol	0.15	0.25	-0.10	-37.72	1.14
<b>Total, All Food</b>	<b>44.51</b>	<b>44.31</b>	<b>0.20</b>	<b>0.45</b>	<b>0.21</b>
<b>Sample Size</b>	<b>1,209</b>	<b>1,080</b>			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Two-tailed statistical tests were performed on all check-coupon differences shown in this table.

ENU = equivalent nutrition unit.

\*\*Statistically significant at the 95 percent confidence level, two-tailed test.

TABLE IV.4  
MONEY VALUE OF FOOD USED AT HOME, BY FOOD GROUP  
(In Dollars per Week per ENU)

Food Group	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Vegetables, Fruit</b>					
Potatoes	0.55	0.57	-0.02	-2.27	0.41
High-nutrient vegetables	1.72	1.70	0.02	1.19	0.23
Other vegetables	1.69	1.69	0.00	0.05	0.01
Mixtures, mostly vegetables; condiments	0.53	0.51	0.02	3.79	0.60
Vitamin-C-rich fruit	0.94	0.88	0.06	6.15	0.76
Other fruit	1.60	1.56	0.04	2.99	0.50
<b>Grain Products</b>					
Whole-grain/high-fiber breakfast cereals	0.54	0.56	-0.02	-3.05	0.42
Other breakfast cereals	0.75	0.72	0.03	3.59	0.60
Whole-grain/high-fiber flour, meal, rice, pasta	0.16	0.17	-0.01	-3.25	0.15
Other flour, meal, rice, pasta	0.89	0.89	0.00	0.51	0.13
Whole-grain/high-fiber bread	0.13	0.13	0.00	2.18	0.17
Other bread	1.01	1.00	0.01	1.33	0.37
Bakery products, not bread	1.27	1.22	0.05	3.92	0.73
Grain mixtures	0.37	0.29	0.08	29.99	2.18 **
<b>Milk, Cheese, Cream</b>					
Milk, yogurt	2.67	2.37	0.30	12.65	2.37 **
Cheese	0.86	0.81	0.05	6.76	1.17
Cream, milk mixtures, mostly milk	0.62	0.63	-0.01	-0.67	0.07
<b>Meat and Alternatives</b>					
Lower-cost red meats, variety meats	3.38	3.56	-0.18	-4.99	1.19
Higher-cost red meats, variety meats	2.84	3.07	-0.23	-7.64	1.42
Poultry	2.30	2.34	-0.04	-1.76	0.43
Fish, shellfish	1.40	1.52	-0.12	-8.01	0.97
Bacon, sausage, luncheon meats	3.15	3.29	-0.14	-4.31	1.18
Eggs	0.59	0.62	-0.03	-4.08	1.23
Dry beans, peas, lentils	0.36	0.32	0.04	10.17	1.50
Mixtures, mostly meat, poultry, fish, egg, legume	1.12	1.19	-0.07	-6.03	0.54
Nuts, peanut butter	0.33	0.27	0.06	24.02	2.49 **
<b>Other Foods</b>					
Fats, oils	1.01	0.98	0.03	2.31	0.55
Sugar, sweets	1.07	0.99	0.08	8.87	1.83 *
Seasonings	0.00	0.00	0.00	-29.87	0.35
Soft drinks, punches, ades	1.70	1.78	-0.08	-4.56	1.02
Coffee, tea	0.56	0.59	-0.03	-5.72	0.85
Alcohol	0.12	0.19	-0.07	-37.28	1.31
<b>Total, All Food</b>	<b>36.25</b>	<b>36.41</b>	<b>-0.16</b>	<b>-0.44</b>	<b>0.21</b>
<b>Sample Size</b>	<b>1,209</b>	<b>1,080</b>			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Two-tailed statistical tests were performed on all check-coupon differences shown in this table, with the exception of the difference for "Total, All Food," for which a one-tailed test was performed.

ENU = equivalent nutrition unit.

\*Statistically significant at the 90 percent confidence level, two-tailed test.

\*\*Statistically significant at the 95 percent confidence level, two-tailed test.

greater money values of food used from four food groups: (1) *grain mixtures* (30 percent more), (2) *milk and yogurt* (13 percent more), (3) *nuts and peanut butter* (24 percent more), and (4) *sugar and sweets* (9 percent more).

### **c. Share of Money Value of Food Used, by Food Group**

The two measures that we have just examined incorporate the effects of cash-out on both the overall level of food use and the distribution of food use across food groups. In this section, we factor out the overall effect of cash-out, small though it might be, and consider only its distributional effects. Our outcome measure is the percentage of the total money value of food used at home that is accounted for by each of the 32 food groups.

The findings from this analysis further confirm those from our analyses of the quantity and money value of food used, by food group. We again obtain weak evidence that cash-out induced shifts away from *meat and alternatives* and from beverages, toward most other groups of foods (Table IV.5). We find statistically significant evidence of a shift away from *whole-grain/high-fiber flour, meal, rice, and pasta* and toward *milk and yogurt, nuts and peanut butter, and sugar and sweets*.

## **B. NUTRIENT AVAILABILITY**

In this section, we investigate whether cash-out led to a reduction in the availability of nutrients from the food used at home by food stamp households. We consider two types of nutrients: (1) *macronutrients* (protein, fat, and carbohydrate), which are the principal sources of food energy,<sup>8</sup> and (2) *micronutrients* (vitamins, minerals, and trace elements), which are essential for the proper growth and maintenance of the human body.

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<sup>8</sup>Alcohol (ethanol) is the only other significant source of food energy. The survey data for this study show that alcohol contributes only 0.1 percent of the energy obtained by food stamp households in Alabama from food used at home. Consequently, we have omitted alcohol from the analysis of food energy and its sources that is presented in this section. The use of alcoholic beverages by food stamp households in Alabama is included in Tables IV.3 through IV.5 of the previous section.

TABLE IV.5  
PERCENTAGE SHARE OF MONEY VALUE OF FOOD USED AT HOME,  
BY FOOD GROUP

Food Group	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Vegetables, Fruit</b>					
Potatoes	1.54	1.61	-0.07	-4.07	0.79
High-nutrient vegetables	4.54	4.58	-0.04	-0.94	0.23
Other vegetables	4.61	4.67	-0.06	-1.15	0.33
Mixtures, mostly vegetables; condiments	1.47	1.46	0.01	1.02	0.18
Vitamin-C-rich fruit	2.51	2.29	0.22	9.71	1.42
Other fruit	4.14	4.03	0.11	2.84	0.59
<b>Grain Products</b>					
Whole-grain/high-fiber breakfast cereals	1.52	1.64	-0.12	-6.99	0.99
Other breakfast cereals	2.20	2.11	0.09	4.35	0.70
Whole-grain/high-fiber flour, meal, rice, pasta	0.37	0.45	-0.08	-18.37	1.84 *
Other flour, meal, rice, pasta	2.51	2.59	-0.08	-3.07	0.82
Whole-grain/high-fiber bread	0.41	0.40	0.01	0.51	0.03
Other bread	3.04	2.94	0.10	3.51	0.99
Bakery products, not bread	3.46	3.28	0.18	5.66	1.20
Grain mixtures	1.00	0.86	0.14	15.92	1.60
<b>Milk, Cheese, Cream</b>					
Milk, yogurt	7.34	6.71	0.63	9.47	2.20 **
Cheese	2.35	2.22	0.13	5.81	1.08
Cream, milk mixtures, mostly milk	1.63	1.69	-0.06	-3.94	0.53
<b>Meat and Alternatives</b>					
Lower-cost red meats, variety meats	9.42	9.83	-0.41	-4.15	1.23
Higher-cost red meats, variety meats	7.56	8.02	-0.46	-5.83	1.33
Poultry	6.67	6.69	-0.02	-0.24	0.06
Fish, shellfish	3.65	3.68	-0.03	-0.89	0.14
Bacon, sausage, luncheon meats	8.89	9.13	-0.24	-2.66	0.93
Eggs	1.82	1.87	-0.05	-2.48	0.68
Dry beans, peas, lentils	1.04	0.96	0.08	8.1	1.20
Mixtures, mostly meat, poultry, fish, egg, legume	2.84	2.91	-0.07	-2.14	0.24
Nuts, peanut butter	0.91	0.74	0.17	22.86	2.49 **
<b>Other Foods</b>					
Fats, oils	2.78	2.76	0.02	0.85	0.23
Sugar, sweets	3.01	2.74	0.27	9.66	2.24 **
Seasonings	0.01	0.00	0.01	14.13	0.15
Soft drinks, punches, ades	4.85	5.00	-0.15	-3.19	0.80
Coffee, tea	1.58	1.69	-0.11	-6.66	1.01
Alcohol	0.32	0.44	-0.12	-26.13	0.93
<b>Total, All Food</b>	<b>100.0</b>	<b>100.0</b>			
<b>Sample Size</b>	<b>1,209</b>	<b>1,080</b>			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Two-tailed statistical tests were performed on all check-coupon differences shown in this table.

ENU = equivalent nutrition unit.

\*Statistically significant at the 90 percent confidence level, two-tailed test.

\*\*Statistically significant at the 95 percent confidence level, two-tailed test.

We define *nutrient availability* as the nutrients provided by all food used at home for a given period; for this study, the given period is the seven-day reference period for the food-use component of the household survey.<sup>9</sup> We computed nutrient availability by multiplying the nutrient content per pound of each type of food by the number of pounds of each type of food used and by summing the products.<sup>10</sup> We report all measures of nutrient availability on a per-ENU basis.<sup>11</sup> When transformed in this way, and subject to the qualifications presented in Chapter III, Section C.3.a, the measure of nutrient availability can be meaningfully compared with the recommended dietary allowance (RDA) for an adult male.<sup>12</sup>

The statistics on the availability of nutrients relative to the RDAs that we present in this section should be used to make only *relative* comparisons between check and coupon recipients in the nutritional adequacy of food used from the home food supply. A finding that the mean availability of a given nutrient exceeds the RDA by a wider margin for one group than for the other should be interpreted as indicating that the group for which the margin is wider is at less nutritional risk than

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<sup>9</sup>*Nutrient intake* is defined on the basis of the food *actually eaten* by individual members of a household, whereas *nutrient availability* is defined on the basis of the food *used* by a household. As explained in Chapter III, Section C.3.a, some food used by a household is lost, wasted, or fed to pets. Thus, a measure of nutrient availability tends to overstate the nutrients actually ingested by household members.

<sup>10</sup>We used a USDA nutrient data base to convert the survey data on the quantity of food used to data on nutrient availability. The data base provides information on the nutrient content per pound of roughly 4,000 foods and food combinations in the form in which they enter the household, with adjustments for cooking losses and inedible components of foods. Most of the nutrient values are supported by laboratory analyses, although some are imputed on the basis of data for similar foods. Hepburn (1982) describes the USDA nutrient data base.

<sup>11</sup>For each nutrient considered in this study, we have computed a nutrient-specific measure of household size in ENUs. As explained in Chapter III, Section C.1, this measure incorporates adjustments for (1) the need of each household member for the nutrient in question, as indicated by his or her RDA for that nutrient, (2) the proportion of each member's meals that is eaten at home, and (3) meals served to guests.

<sup>12</sup>Chief among the qualifications is the fact that the RDAs have been established as a basis for evaluating the adequacy of nutrient intake. Nutrient availability tends to exceed nutrient intake. Thus, a finding that nutrient availability exceeds the RDA does not necessarily mean that nutrient intake also exceeds the RDA.



the other group.<sup>13</sup> Although availability below the RDA for a nutrient does not necessarily imply dietary inadequacy, the risk of dietary inadequacy increases as the mean availability of a nutrient falls further below the RDA. A finding that the proportion of households for which the availability of a nutrient exceeds the RDA is greater in one group than in the other should also be interpreted in a relativistic fashion. *The reader is cautioned to avoid drawing conclusions from these findings about the absolute number or proportion of check and coupon households that are at nutritional risk.*<sup>14</sup>

We begin the analysis by examining the effects of food stamp cash-out on the availability of food energy and of its sources (protein, carbohydrate, and fat). We then compare the availability of nutrients per kilocalorie of food energy in check and coupon households. In Section 3, we describe the impact of cash-out on seven micronutrients relative to their RDAs and, in Section 4, examine the availability of food energy and nutrients per dollar value of food used.

To summarize the findings, the combined data on household food use by urban and rural food stamp recipients show that cash-out did not result in lower availability of food energy or of the seven micronutrients examined. However, among urban households, cash-out was accompanied by a small shift away from fat and to carbohydrate as a source of food energy.

## **1. Food Energy and Its Sources**

The food used by households in the United States, including those below the poverty threshold, generally provides amounts of food energy that, on average, are more than adequate to meet the needs of the household members. Indeed, obesity resulting from the chronic intake of food energy in excess of requirements is a major public health concern. The availability of food energy to food

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<sup>13</sup>As defined in Chapter III, nutritional risk is the likelihood of having insufficient nutrients available to maintain good health.

<sup>14</sup>The principal reasons for this caution are, as explained in Chapter III, Section C.3.a, that (1) the RDAs are established to exceed the average person's requirements for nutrient intake by a substantial margin, and (2) the RDAs are recommendations for nutrient *intake*, whereas the Alabama survey data provide information on nutrient *availability*.

stamp households in Alabama reflects this pattern. Table IV.6 shows that the mean availability of food energy per ENU was 162 percent of the RDA for both check households and coupon households.<sup>15</sup> The table also shows that the food used by 80 percent of both check households and coupon households provided food energy that equalled or exceeded the RDA.<sup>16</sup> Thus, the evidence from the data in the household survey supports the conclusion that cash-out did not lead to a reduction in the availability of food energy to food stamp recipients.

Protein is the only macronutrient for which an RDA has been established. Table IV.6 shows that the mean availability of protein was quite high relative to its RDA and was virtually identical for check and coupon households.<sup>17</sup> The table also shows that the household survey presents no evidence that cash-out resulted in any reduction in the very high percentage of households that used food providing at least 100 percent of the RDA for protein.

Throughout this century, the proportion of food energy obtained from protein by Americans has remained relatively stable, whereas the proportion from fat has increased and the proportion from carbohydrate has decreased. The Committee on Diet and Health of the Food and Nutrition Board recommends that no more than 30 percent of food energy in the U.S. diet be provided by fat (National Research Council, 1989a). In addition, the Subcommittee on the Tenth Edition of the RDAs of the Food and Nutrition Board recommends that more than one-half of food energy be provided by carbohydrate (National Research Council, 1989b). However, from 1979 to 1980, protein contributed approximately 17 percent of the food energy in the diets of low-income Americans, fat

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<sup>15</sup>The regression-adjusted estimate of the effect of cash-out on the availability of food energy, as with the simple-difference-in-means estimate that is shown in Table IV.6, is very small and statistically insignificant. See Appendix Table E.1, for the regression-adjusted estimate.

<sup>16</sup>Appendix Figure G.2 shows that cash-out had very little effect on the lower tail of the cumulative distribution of food energy availability per ENU. In particular, the figure shows that cash-out had no effect on the proportion of households for which the availability of food energy is less than the RDA.

<sup>17</sup>The regression-adjusted estimate of the effect of cash-out on the availability of protein, as with the simple-difference-in-means estimate that is shown in Table IV.6, is very small and statistically insignificant. See Appendix Table E.1, for the regression-adjusted estimate.

TABLE IV.6  
AVAILABILITY OF FOOD ENERGY AND PROTEIN

Nutrient	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Average Availability of Food Energy (percent of RDA)	162.19	161.46	0.73	0.45	0.22
Percent of Households Meeting or Exceeding RDA for Food Energy	79.65	79.81	-0.16	-0.20	0.10
Average Availability of Protein (percent of RDA)	258.18	258.99	-0.81	-0.31	0.15
Percent of Households Meeting or Exceeding RDA for Protein	95.12	96.02	-0.90	-0.94	1.05
Percent of Food Energy from:					
Protein	14.18	14.20	-0.02	-0.15	0.15
Fat	42.42	42.96	-0.54	-1.27	1.53
Carbohydrate	43.40	42.84	0.56	1.33	1.45
Sample Size	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit, which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in the first four rows of this table. Two-tailed tests were performed on the check-coupon differences in the percentages of food energy from protein, fat, and carbohydrate.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

Appendix Table G.2 presents the median values of the variables shown in this table.  
Appendix Table I.2 presents standard errors of the estimates shown in this table.

RDA = recommended dietary allowance.

contributed 39 percent, and carbohydrate contributed 44 percent (U.S. Department of Agriculture, Human Nutrition Information Service, September 1982).

Food stamp households in Alabama receive an average of 14 percent of total food energy from protein, 43 percent from fat, and 43 percent from carbohydrate. Table IV.6 shows that, relative to coupon households, check households received slightly less total food energy from fat, and slightly more from carbohydrate; however, these small differences are not statistically significant.

**Disaggregated Results for Urban and Rural Households.** We conducted disaggregated analyses of the effects of cash-out on the availability of food energy and of its component sources to urban and rural households in Alabama. We present the findings from those analyses in Appendix Tables J.2.A and J.2.B. The tables show that cash-out did not result in lower availability of food energy or protein to either urban or rural households. In addition, cash-out had no effect on the percentages of total food energy obtained by rural households from fat and from carbohydrate. However, Appendix Table J.2.A shows that, for urban households, cash-out was accompanied by a statistically significant shift of 1.1 percentage point from fat to carbohydrate as a source of food energy. Thus, cash-out moved urban households, but not rural households, by a small amount in the direction of compliance with guidelines for the percentage of total food energy that should be obtained from fat and carbohydrate.

## **2. Nutrient Availability**

The fact that cash-out did not lead to reductions in either the money value of food used at home or the availability of food energy from food used at home suggests that cash-out is unlikely to have led to reductions in the availability of micronutrients. However, in principle, cash-out could have affected food-use patterns in such a way as to reduce the availability of micronutrients while leaving unchanged the availability of food energy and the money value of food used at home. As described in this section, the findings from our analysis of micronutrient availability indicate that this effect did not occur.

In Tables IV.7 and IV.8, we present the survey findings on the availability of seven micronutrients that are considered potentially problematic from a public health perspective.<sup>18,19</sup> Table IV.7 shows that the mean availabilities of the seven micronutrients, expressed as percentages of the RDAs, are not significantly lower for check households than for coupon households.<sup>20</sup> The check-coupon differences that do exist are small, and their signs are inconsistent.<sup>21</sup> Furthermore, when urban and rural households are considered separately, as in Appendix Tables J.3.A and J.3.B, the check-coupon differences in the mean availabilities of the seven micronutrients are also small and statistically insignificant.

When we use an alternative criterion to evaluate nutrient adequacy (the percentage of households for which the availability of a nutrient per ENU equals or exceeds the RDA for an adult male), we again find that cash-out did not result in reductions in the availability of micronutrients to the caseload as a whole (Table IV.8) or to the urban or rural components of the caseload (Appendix Tables J.4.A and J.4.B).<sup>22,23</sup>

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<sup>18</sup>The seven micronutrients are those for which RDAs exist and that have been classified by the Expert Panel on Nutrition Monitoring as either a current or potential public health issue (Life Sciences Research Office, 1989).

<sup>19</sup>The results for coupon households that are shown in Tables IV.7 and IV.8 are broadly consistent with existing estimates, based on the USDA's 1979-1980 Survey of Food Consumption in Low-Income Households, of the availability of selected nutrients per ENU (U.S. Department of Agriculture, Human Nutrition Information Service, July 1982, pages 26 and 27).

<sup>20</sup>The entries in the first two columns of Table IV.7 show average nutrient availability per equivalent adult male nutrition unit, expressed as a percentage of the RDA for an adult male. For example, the entry in the "check" column for vitamin A indicates that check households used foods that provided an average of 227.32 percent of the RDA for vitamin A.

<sup>21</sup>Regression-adjusted estimates of the check-coupon differences in the mean availabilities of the seven selected micronutrients, expressed as a percentage of the RDAs, are presented in Appendix Table E.1. Those estimates have the same signs as the simple-difference-in-means estimates that are shown in Table IV.7. They are also statistically insignificant and of the same magnitude as the simple-difference-in-means estimates.

<sup>22</sup>The entries in the first two columns of Table IV.8 show the percentage of households for which the availability of a nutrient per equivalent adult male nutrition unit equals or exceeds the RDA for an adult male. For example, the entry in the "check" column for vitamin A indicates that 75.52 percent of check households had sufficient availability of vitamin A to equal or exceed the RDA.

(continued...)



TABLE IV.7  
NUTRIENT AVAILABILITY PER ENU:  
PERCENTAGE OF RDA

Nutrient	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Vitamin A	227.32	229.71	-2.39	-1.04	0.26
Vitamin C	250.63	255.40	-4.77	-1.87	0.60
Vitamin B <sub>6</sub>	157.59	157.30	0.29	0.19	0.09
Folate	223.94	221.69	2.25	1.02	0.39
Calcium	121.34	117.61	3.73	3.18	1.23
Iron	183.99	183.87	0.12	0.06	0.02
Zinc	127.28	128.87	-1.59	-1.23	0.56
Sample Size	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit (ENU), which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

Appendix Table G.3 presents median values of the variables shown in this table. Appendix Table I.3 presents standard errors of the estimates shown in this table.

RDA = recommended dietary allowance.

**TABLE IV.8**  
**NUTRIENT AVAILABILITY PER ENU:**  
**PERCENTAGE OF HOUSEHOLDS FOR WHICH AVAILABILITY**  
**EQUALS OR EXCEEDS THE RDA**

	Percentage		Difference in Percentages		
	Check	Coupon	Absolute	Percentage	t-Statistic
Vitamin A	75.52	74.17	1.35	1.82	0.74
Vitamin C	84.37	84.07	0.30	0.35	0.19
Vitamin B <sub>6</sub>	75.10	75.83	-0.73	-0.96	0.41
Folate	85.36	85.37	-0.01	-0.01	0.01
Calcium	53.60	50.56	3.04	6.02	1.45
Iron	82.22	80.28	1.94	2.42	1.18
Zinc	60.71	61.20	-0.49	-0.80	0.24
Sample Size	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit (ENU), which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

Appendix Table I.4 presents standard errors of the estimates shown in this table.

RDA = recommended dietary allowance.



TABLE IV.9  
NUTRIENT AVAILABILITY PER 1,000 KILOCALORIES  
OF FOOD USED AT HOME  
(Nutrient Density)

Nutrient	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Vitamin A (µgRE)	544.52	536.63	7.89	1.47	0.41
Vitamin C (mg)	43.15	43.53	-0.38	-0.86	0.30
Vitamin B <sub>6</sub> (mg)	0.75	0.75	0.00	0.18	0.12
Folate (µg)	106.97	106.05	0.92	0.87	0.41
Calcium (mg)	314.60	306.34	8.26	2.70	1.66 *
Iron (mg)	6.49	6.47	0.02	0.38	0.22
Zinc (mg)	4.69	4.75	-0.06	-1.24	1.06
Sample Size	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Two-tailed statistical tests were performed on all check-coupon differences shown in this table.

\*Statistically significant at the 90 percent confident level, two-tailed test.

check-coupon differences in mean nutrient densities are less than 1.5 percent and are not statistically significant. Only for calcium is the mean density significantly greater (by 2.7 percent) for check recipients than for coupon recipients. Thus, for all of the seven micronutrients except calcium, we conclude that food stamp cash-out in Alabama did not affect nutrient densities.

#### **4. Nutrient Availability per Dollar Value of Food Used**

In principle, under cash-out, some households might have an incentive to economize on food purchases in order to have money to purchase nonfood items. One strategy to reduce expenditures for food while minimizing the impact of such a reduction on nutritional well-being would be to shift to less expensive food groups, and from highly processed food and food with national brand names to food that is not highly processed and to store brands or generic brands. Although such food is typically less expensive than processed, brand-named food, its nutrient content is not necessarily lower. Evidence in the household-survey data indicating that check recipients had, in fact, adopted such a strategy would be a higher ratio of nutrients per dollar value of food used for check recipients than for coupon recipients.

Table IV.10 shows that, for protein and for six of the seven micronutrients, the differences between check and coupon households in the sample mean availabilities of nutrients per dollar value of food used are 1 percent or less and are mixed in sign. Only for calcium is the availability per dollar of food used significantly greater for check recipients than for coupon recipients. That difference is about 2 percent. Therefore, our results provide little evidence to support the hypothesis that check recipients used foods that were lower in price but as rich in nutrients as those used by coupon households.

TABLE IV.10  
NUTRIENT AVAILABILITY PER DOLLAR VALUE  
OF FOOD USED AT HOME

Nutrient	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Protein per Dollar (gm/dollar)	31.59	31.42	0.17	0.52	0.49
Vitamin A per Dollar ( $\mu$ gRE/dollar)	491.73	487.70	4.03	0.83	0.23
Vitamin C per Dollar (mg/dollar)	38.38	38.58	-0.20	-0.52	0.20
Vitamin B <sub>6</sub> per Dollar (mg/dollar)	0.68	0.68	0.00	-0.02	0.01
Folate per Dollar ( $\mu$ g/dollar)	97.31	96.25	1.06	1.10	0.55
Calcium per Dollar (mg/dollar)	289.83	282.90	6.93	2.45	1.36 <sup>†</sup>
Iron per Dollar (mg/dollar)	5.96	5.93	0.03	0.61	0.34
Zinc per Dollar (mg/dollar)	4.28	4.31	-0.03	-0.76	0.64
Sample Size	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for greater nutrient availability per dollar value of food used at home by check recipients were performed on the check-coupon differences shown in this table.

<sup>†</sup>Statistically significant at the 90 percent confidence level, one-tailed test.

### **C. PERCEPTIONS OF FOOD ADEQUACY**

Several questions in the survey were designed to provide information about the adequacy of the household's food supply. The survey asked questions about (1) the perceived adequacy of household food supplies (and, for households whose benefit form was converted from coupons to checks, changes in the quantity and quality of purchased food), (2) whether households run out of food or skip meals because the quantity of food or the resources to buy food are insufficient (and, if they do so, how often), and (3) the actions that households might take during the month to obtain food because the quantity is insufficient.

In this section, we present the survey respondents' descriptions of the adequacy of their home food supplies. Section IV.C.1 discusses the findings on the recipients' self-assessments of household food adequacy. In addition, for recipients whose benefit form was converted from coupons to checks, the section also discusses the findings from the self-assessments on perceived changes in the quantity and quality of food. Section IV.C.2 compares check and coupon households' experiences of running out of food and describes actions to obtain food when quantities of food were insufficient. Section IV.C.3. discusses the participation of recipients in other food-assistance programs and their use of nonpurchased food from nonprogram sources.

To summarize the findings, data from the household survey strongly indicate that check recipients were no more likely than coupon recipients to perceive their household food supplies to be inadequate. The data also indicate that check households were no more likely than coupon households to run out of food, to skip meals, or to try to obtain additional food. A large majority of check recipients whose benefit form had been converted from coupons believed that they were buying about the same amount of food with checks as they had with coupons, and that the quality of the food was the same. During the month preceding the survey, roughly equal percentages of check households with children and coupon households with children reported participating in the National School Lunch Program (NSLP) and the School Breakfast Program (SBP); roughly equal

percentages of check and coupon households containing a pregnant or lactating woman or a child less than 5 years old reported participating in WIC. However, check households were more likely than coupon households to have received USDA commodities.

### **1. Perceived Adequacy of the Household Food Supply**

We asked all of the participants in the household survey to evaluate the adequacy of their household food supplies.<sup>25</sup> Large majorities of both check households and coupon households reported that they perceived themselves to have had adequate supplies of food during the month preceding the survey. Table IV.11 shows that 35 percent of check recipients reported getting enough of the desired kinds of food, and that 48 percent reported getting enough food, although not always of the desired types. The table also shows that 34 percent and 47 percent of coupon recipients had these respective perceptions of the adequacy of their household food supplies. Thus, roughly 84 percent of check households and 81 percent of coupon households reported getting enough food during the month preceding the survey.

Minorities of both check households and coupon households reported that they sometimes or often did not have adequate supplies of food during the month preceding the survey. Table IV.11 shows that 16 percent of check households and 19 percent of coupon households reported that they sometimes or often had inadequate supplies of food during the preceding month.<sup>26</sup> We do not

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<sup>25</sup>Check and coupon households were asked, "Which of the following statements best describes the food eaten in your household last month: enough of the kinds of food we want to eat; enough, but not always the kinds of food we want to eat; sometimes not enough to eat; or often not enough to eat."

<sup>26</sup>The finding of no effect of cash-out on respondents' perceptions of food adequacy is consistent with our previously reported finding of no effect of cash-out on the availability of food energy, protein, and seven micronutrients (see Tables IV.6, IV.7, and IV.8). Also, the finding that 16 percent of check recipients and 19 percent of coupon recipients perceived their households to sometimes or often have not enough food is roughly consistent with the finding that the availability of food energy and five micronutrients was less than the RDAs for those nutrients for between 15 percent and 25 percent of both check and coupon households.

TABLE IV.11

**RECIPIENTS' PERCEPTIONS OF ADEQUACY OF HOUSEHOLD FOOD SUPPLY**  
(Percentage of Households)

	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Adequacy of Food Eaten During Past Month</b>					
Enough of types of food we want to eat	35.46	34.04	1.42	4.16	0.73
Enough, but not always types we want to eat	48.45	47.13	1.32	2.80	0.64
Sometimes or often not enough	16.02	18.57	-2.55	-13.74	1.64
<b>Any Days Household Without Food or Resources During Past Month?</b>					
Yes	21.20	23.43	-2.23	-9.54	1.31
Number of days <sup>a</sup>	5.01	5.51	-0.50	-9.11	1.56
<b>Any Household Member Skip Meals due to Inadequate Food or Resources During Past Month?</b>					
Yes	8.21	9.90	-1.69	-17.12	1.44
Number of days when meals were skipped <sup>b</sup>	5.17	5.62	-0.45	-8.06	0.65
<b>Sample Size</b>	1,255	1,131			

**SOURCE:** Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

**NOTE:** One-tailed statistical tests for lower perceptions of food adequacy among check recipients were performed on all check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

"Past month" is the month preceding the survey.

<sup>a</sup>For households reporting at least one day without food or resources to buy food during the past month.

<sup>b</sup>For households reporting that a household member skipped one or more meals on at least one day during the past month.

know whether these perceptions of food adequacy were influenced by the size of the food stamp benefit, how the benefit was used, or other factors.

These findings show that check households were no more likely than coupon households to report that they sometimes or often did not have enough food. Appendix Tables J.5.A and J.5.B present very similar findings for the urban and rural subsamples. Thus, on the basis of the perceptions of food stamp recipients, we have no evidence that cash-out diminished the adequacy of recipients' household food supplies.

The household survey provides additional evidence that check households did not generally perceive their home food supply situation to have deteriorated under cash-out. The check households whose benefit form had been converted from coupons when the cash-out demonstration began were asked whether there had been any changes in the quantity and quality of the food that they purchased. Eighty-three percent reported buying either more food or about the same amount of food with checks as with coupons, and 90 percent felt that the quality of the food was the same or better.

## **2. FSP Households' Experiences in Running Out of Food**

If budgeting food expenses is more difficult with checks than with coupons, then check recipients might be more likely than coupon recipients to have inadequate home food supplies. The household survey included two questions that were designed to obtain somewhat more objective information on the incidence of inadequate home food supplies. One survey question asked households whether there had been any days in the previous month during which their household had neither food nor the resources to buy food.<sup>27</sup> A second question asked whether any household member had skipped

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<sup>27</sup>Check and coupon households were asked: "Last month were there days when your household had no food, money, or food stamps to buy food?; if so, on how many days did this happen?"

meals because the household lacked food or the resources to buy food.<sup>28</sup> In general, check households were no more likely than coupon households to report having run out of food or having skipped meals. We discuss these findings in greater detail in this section.

Approximately one-fifth of both check recipients and coupon recipients reported having neither food nor the resources to buy food on one or more days during the most recently completed month preceding the survey month (Table IV.11).<sup>29</sup> Check households were no more likely than coupon households to report this problem. In fact, a smaller percentage of check households than coupon households reported having neither food nor the resources to buy food (21 percent versus 23 percent). Of the households reporting the problem, coupon recipients, relative to check recipients, reported having neither food nor the resources to buy food for slightly more days during the month preceding the survey (an average of five and one-half days for coupon recipients versus five days for check recipients). Thus, no evidence suggests that cash-out increased the number of days during which check households lacked food or the resources to buy food.

A smaller percentage of check households than coupon households reported skipping meals (8 percent versus 10 percent, as shown in Table IV.11). Of the households that reported skipping meals,

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<sup>28</sup>Check and coupon households were asked: "Last month did anyone in your household skip any meals because there was not enough food, or money or food stamps to buy food?; if so, on how many days did this happen last month?"

<sup>29</sup>Table IV.11 shows that the percentage of respondents reporting having no food or no resources to buy food on one or more days during the most recently completed month exceeded the percentage reporting sometimes or often not having enough food to eat during the previous month. For example, 21 percent of check households reported going at least one day without food or the resources to buy food, whereas only 16 percent of check households reported that they sometimes or often did not have enough food to eat. This difference probably is due to differences in the wording of the questions. The question about "enough" food yields a subjective measure of the adequacy of the household's food supply because it asked respondents to characterize the adequacy of the household food supply; the other question yields a more objective measure because it asked respondents to recall any days with insufficient food or resources to buy food. It is also likely that, on some days, households *began* the day without food or the resources to buy food but were able to obtain food during the day (perhaps through friends or food pantries) in order to meet meal requirements. A respondent in this situation would probably have responded positively to the general question about whether the household had had enough food to eat, but positively as well to the question about whether the household had sometimes been without food or the resources to buy food.



check households skipped meals on an average of five days, whereas coupon households did so on an average of five and one-half days. Thus, the data reject the hypothesis that check recipients are more likely than coupon recipients to skip meals because of a lack of food or resources to buy food.

### **3. Actions Taken by Recipients Because Households Lacked Food**

If cash-out causes benefits that are normally budgeted for food to be diverted to nonfood expenditures, recipients might try to compensate by seeking out other program or nonprogram sources of food. The survey addressed this issue by asking households whether they took any of several actions to obtain food during the month preceding the survey because they did not have enough food.<sup>30</sup>

The five most frequently mentioned actions to obtain food (Table IV.12) were: (1) buying or serving less expensive meals, (2) serving smaller meals, (3) borrowing food from friends or relatives, (4) borrowing money from friends or relatives, and (5) eating at the homes of friends or relatives.<sup>31</sup> About one-third of the households that reported any action to obtain food reported taking each of the first two actions, whereas roughly one-tenth reported taking each of the last three actions. Check recipients were no more likely than coupon recipients to report taking these actions; indeed, they were about 25 percent *less* likely than coupon recipients to borrow food from friends or relatives or to eat at the homes of friends or relatives.

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<sup>30</sup>Respondents were asked: "Last month did anyone in your household do any of the following because there was not enough food to eat? Borrow food from friends or relatives; Eat at friends' or relatives' homes; Take money out of savings to buy food; Borrow money to buy food; Buy food on credit; Work extra hours or jobs; Buy or serve smaller meals; Eat one or more meals at a soup kitchen or church; Get food from a place like a food bank or food pantry; Apply for WIC benefits; Apply for AFDC benefits; or, anything else?"

<sup>31</sup>In interpreting the findings regarding the buying or serving of less expensive or smaller meals, it should be noted that these response categories were stated and coded in *relative* terms--that is, relative to a time when the responding households did not have inadequate food. Many respondents may have routinely served small or inexpensive meals but did not so indicate when responding to this question because they had not intensified that behavior when faced with a shortage of food during the previous month.

TABLE IV.12  
NUMBER AND TYPES OF ACTIONS TAKEN TO  
OBTAIN FOOD DURING THE PAST MONTH  
(Percentage of Households)

Measure of Household Food Supply	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Household Took the Following Actions to Get Food During the Past Month</b>					
Buy or serve less expensive meals	33.76	35.23	-1.47	-4.16	0.75
Serve smaller meals	30.28	31.27	-0.99	-3.16	0.52
Borrow money to buy food	8.54	12.20	-3.66	-30.01	2.92
Borrow food from friends or relatives	11.33	13.19	-1.86	-14.05	1.37
Eat at the homes of friends or relatives	8.79	11.58	-2.79	-24.15	2.25
Get food at food bank, food pantry, or a church	2.07	1.86	0.21	11.67	0.38
Take money out of savings to buy food	2.79	2.74	0.05	1.91	0.08
Eat one or more meals at a church, soup kitchen, or senior center	1.52	1.50	0.02	0.88	0.03
Buy food on credit	4.63	5.66	-1.03	-18.13	1.13
Take on additional work in order to pay for food	2.96	3.27	-0.31	-9.59	0.44
Apply for WIC	3.03	3.81	-0.78	-20.37	1.04
Apply for AFDC benefits	2.07	1.42	0.65	46.43	1.23
Other action in order to get food	0.48	0.72	-0.24	-32.84	0.74
<b>Number of Actions Taken by Household to Get Food During the Past Month</b>					
None	52.27	48.01	4.26	8.87	2.08
One	15.06	16.09	-1.03	-6.41	0.69
Two	15.94	15.92	0.02	0.13	0.01
Three or more	16.73	19.98	-3.25	-16.26	2.04
<b>Sample Size</b>	1,255	1,131			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for a greater tendency for check recipients to take actions to obtain food were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

"Past month" is the month preceding the survey.

All households were asked whether they had taken any actions to obtain food during the past month because they did not have enough food. The top part of this table shows the types of such actions, whereas the bottom part shows the number of actions. The entire subsamples of check and coupon households were used to compute the percentages in the first two columns of this table.

WIC = Special Supplemental Food Program for Women, Infants, and Children; AFDC = Aid to Families with Dependent Children.

Check households also did not report taking more actions than coupon recipients to obtain food. The bottom portion of Table IV.12 shows that check households were four percentage points more likely to take *no action* to obtain food and were three percentage points less likely to take *three or more actions*. On the basis of these findings, we reject the hypothesis that cash-out might force recipient households to take unusual steps in order to obtain food.<sup>32</sup>

#### **4. Participation in Other Food-Assistance Programs and Availability of Nonpurchased Food from Sources Other than Government Programs**

The survey asked households about their participation in food-assistance programs other than the FSP and about the availability of nonpurchased food from nonprogram sources. The program sources of food were the NSLP, the SBP, WIC, and the USDA commodity distribution programs. Nonprogram sources of food consisted of home-produced food and food received as a gift or in-lieu of payment.

##### **a. Participation in Other Food-Assistance Programs**

Of the four other program sources of food examined in the household survey, only for the commodity distribution program did check households report a significantly higher rate of participation than coupon households (Table IV.13). Twenty percent of check households reported receiving USDA commodities, compared with 17 percent of coupon households. In addition, check households containing a pregnant or lactating woman or a child less than 5 years of age were more likely than comparable coupon households to have reported participating in the WIC program during

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<sup>32</sup>Table IV.12 shows that about one-half of the survey respondents reported taking one or more actions to obtain food because there was not enough food to eat, but Table IV.11 indicates that the majority also reported having adequate supplies of food. This set of findings is not contradictory when we consider the following. When answering the subjective question on the adequacy of the household food supply, it is reasonable to assume that respondents considered the food supply to include food that was obtained through specific actions that were taken by household members because there was not enough food. For example, a respondent may have reported that household members had to borrow food from friends. The respondent also may have reported that the household had enough to eat if he or she thought that borrowing food enabled the household to obtain an adequate supply of food.

TABLE IV.13  
PARTICIPATION IN OTHER FOOD-ASSISTANCE PROGRAMS  
AND USE OF NONPURCHASED FOOD

Source of Food	Sample Size		Mean Value		Difference in Means		
	Check	Coupon	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Participation in Other Food-Assistance Programs</b>							
National School Lunch Program							
Percent of households participating <sup>a</sup>	536	495	75.19	78.79	-3.60	-4.57	-1.37
Subsidy value of school lunches (dollars per week) <sup>b</sup>	403	390	9.72	10.68	-0.96	-8.96	1.46
School Breakfast Program							
Percent of households participating <sup>c</sup>	334	305	60.78	61.64	-0.86	-1.40	-0.22
Subsidy value of school breakfasts (dollars per week) <sup>b</sup>	203	188	4.84	4.71	0.13	2.79	0.30
Surplus Commodities							
Percent of households receiving during past month <sup>d</sup>	1,209	1,080	19.60	16.94	2.66	15.69	1.65 <sup>††</sup>
Food Obtained by Redeeming a WIC Voucher							
Percent of households reporting <sup>e</sup>	407	365	50.37	47.67	2.70	5.66	0.75
Money value of WIC food (dollars per week) <sup>b</sup>	205	174	13.09	12.73	0.36	2.79	0.35
<b>Use of Nonpurchased Food</b>							
Home-Produced Food							
Percent of households reporting <sup>d</sup>	1,209	1,080	18.11	17.78	0.33	1.89	0.21
Money value of home-produced food (dollars per week) <sup>b</sup>	219	192	5.58	4.70	0.88	18.63	1.14
Food Received as Gift or in Payment							
Percent of households reporting <sup>d</sup>	1,209	1,080	35.65	38.89	-3.24	-8.33	1.60
Money value of gift/pay food (dollars per week) <sup>b</sup>	431	420	4.47	4.56	-0.09	-1.98	0.16
Average Money Value of Non-purchased Food (dollars per week) <sup>d</sup>	1,209	1,080	4.84	4.69	0.15	3.19	0.38

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for greater participation in other programs and use of nonpurchased food by check recipients were performed on the check-coupon differences shown in this table. "Past month" is the month preceding the survey.

<sup>a</sup>For households with children who attend schools that serve complete USDA lunches.

<sup>b</sup>For households reporting use of program or food source.

<sup>c</sup>For households with children who attend school that serve complete USDA school breakfasts.

<sup>d</sup>For all households.

<sup>e</sup>For households with pregnant/lactating women or children less than 5 years old.

WIC = Special Supplemental Food Program for Women, Infants, and Children; USDA = U.S. Department of Agriculture.

<sup>††</sup>Statistically significant at the 95 percent confidence level, one-tailed test.

the month preceding the survey (50.4 percent versus 47.7 percent).<sup>33</sup> However, this difference is not statistically significant.

Check and coupon households were equally likely to participate in the NSLP and the SBP during the month preceding the survey. Of check and coupon households with children attending schools that served USDA lunches and breakfasts, about 75 percent reported participating in the NSLP, and about 61 percent reported participating in the SBP.<sup>34</sup>

Table IV.13 also shows that the subsidy values of benefits received under the NSLP and SBP were roughly the same for check and coupon recipients. Likewise, the money value of food obtained by redeeming WIC vouchers was quite similar for the two groups. The survey data do not permit us

## **V. THE EFFECTS OF CASH-OUT ON EXPENDITURES FOR FOOD AND NONFOOD ITEMS AND ON FOOD-SHOPPING PATTERNS**

By eliminating the direct link between Food Stamp Program (FSP) benefits and food purchases that exists under the coupon-based system, checks might induce recipients to reduce expenditures for food used at home. On the other hand, because cash-out does not restrict program benefits to the purchase of eligible food items only, check households might substitute expenditures for food that is prepared and eaten away from home for food formerly purchased for home use. Thus, one objective of our analysis is to assess the effect of cash-out on expenditures for food used at home, expenditures for food used away from home, and on the total amounts that households spend for food. In addition, if cash-out does reduce the total amounts that households spend for food, we are interested in determining how the freed-up money is spent for nonfood goods and services.

Converting the benefit form from coupons to checks might affect the types of stores at which recipients shop. For example, in Puerto Rico, focus group discussions held subsequent to food stamp cash-out revealed that some households shifted their food purchases from small grocery stores to supermarkets (Stanford Klapper Associates, 1985). Cash-out might also affect the frequency with which recipients shop. For example, recipients might shop more often, because it is less embarrassing to use check benefits than coupons when making purchases. In addition, cash-out might affect the frequency with which recipients shop at different types of stores, because recipients can use checks at a wide variety of stores, but can use coupons only at authorized retail food stores.

To address questions about the impact of cash-out on food and nonfood expenditures, we used data from the main questionnaire of the household survey. To address questions about the impact of cash-out on household food-shopping patterns, we used data from the screening interview for the household survey (the "screener"). In the analyses, we present sample mean values separately for check and coupon households and conduct formal difference-of-means tests to compare outcomes.

The chapter is organized into two sections. Section A discusses findings on expenditures for food used at home and for food used away from home and examines expenditure shares by broad consumption category. Section B presents findings on the types of stores at which recipients purchased food and on the usual number of shopping trips per month to each type.

## **A. IMPACTS ON FOOD AND NONFOOD EXPENDITURES**

In Section A.1, we examine the impact of cash-out on monthly expenditures for food. In the analyses, we use the *monthly money value of purchased food used at home* as the measure of monthly expenditures for food used at home. This measure is based on information obtained from the main questionnaire. The measure is the same as that used in the analyses reported in Chapter IV, Section A.1, except that it has been converted from a weekly to a monthly basis.<sup>1</sup> The *monthly expenditures for food used away from home*, which is the measure of monthly expenditures for food purchased and eaten away from home, is also based on information obtained from the main questionnaire. The measure comprises the household's reported total expenditures for food eaten at restaurants, bars, cafeterias, cafes, and fast food places during the seven days preceding the interview (multiplied by 4.3 weeks, to convert to a monthly amount) plus the amount paid in the calendar month preceding the interview for school meals and for meals or snacks received at day care homes or centers.<sup>2</sup> *Total expenditures for food* is the sum of the money value of purchased food used at home and expenditures for food used away from home.<sup>3</sup>

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<sup>1</sup>This measure is based on a seven-day accounting of each individual food item used from the home food supply. We computed the money value of each reported food item that was purchased as the quantity used multiplied by the unit price. We arrived at the total money value of purchased food used at home per week by summing the money value over all of the different types of purchased foods used. We obtained the total money value of purchased food used at home per month by multiplying the per-week amount by 4.3 weeks. See Chapter III, Section C.2, for additional details.

<sup>2</sup>See Chapter III, Section C.4, for additional details.

<sup>3</sup>Two measures of monthly expenditures for food used at home are available in the data set. The measure described in the text is based on information obtained from the main questionnaire. The other measure, monthly expenditures for food from stores, is based on information from the screener  
(continued...)

In Section A.2, we assess whether cash-out caused any shifts in the allocation of total expenditures away from food to various categories of nonfood goods and services. We converted monthly expenditures for food and for nine broad categories of nonfood items into *expenditure shares*. An expenditure share is the proportion of all reported expenditures allocated to a specific expenditure category.<sup>4</sup>

To summarize the findings, cash-out did not result in lower household expenditures for food used at home. On a per-adult-male-equivalent (AME) basis, check households reported spending slightly less for *food used at home* than did coupon households; however, the difference is very small and not statistically significant. Cash-out did not result in higher expenditures on *food used away from home*. In fact, check households reported spending somewhat less (not more) than coupon households for food used away from home per AME. Considering the combination of expenditures for food used at home and away from home, cash-out did not result in lower *total expenditures for food* per AME by food stamp households; check households reported spending about 1 percent less on all food than

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<sup>3</sup>(...continued)

and equals the amount that respondents reported spending for food at supermarkets, neighborhood grocers, convenience stores, and specialty stores during the previous month. The existence of the second measure of expenditures for food used at home means that we have two sets of findings on the impact of cash-out on expenditures for food used at home and for all food. Although the findings vary slightly depending on which data set is used, the basic implications of the analysis do not change.

As discussed in detail in Appendix H, on the basis of an analysis of the structures of the two question sequences and of the use of recall aids, we believe that the findings from the main questionnaire are the more accurate. As a result, the analysis focuses on these findings.

To provide a full overview of the survey findings, the report presents results based on both measures of food expenditures. However, in light of the considerations discussed in the previous paragraph, we recommend that the reader focus on the results that are based on data from the main survey instrument, as discussed in the main body of the report. We discuss the results that are based on data from the screener in Appendix H.

<sup>4</sup>The existence of a second measure of expenditures for food used at home means that we have two sets of findings on the impact of cash-out on food and nonfood expenditure shares (see the discussion in Footnote 3). We present the results based on the main questionnaire in the text and discuss the results based on data from the screener in Appendix H.



coupon households, but this difference is not statistically significant.<sup>5</sup> Finally, our findings provide only weak evidence that cash-out resulted in shifts of expenditures away from food to other consumption categories. For just one of nine nonfood consumption categories did we find statistically significant evidence of such a shift.

### **1. Expenditures for Food Used at Home and for Food Used Away from Home, and Total Expenditures for Food**

In this section, we use data from the main questionnaire to discuss the impact of cash-out on expenditures for food used at home and for food used away from home, as well as on total expenditures for food. We discuss the findings for all check and coupon households, as well as for urban and rural check and coupon households.

#### **a. Expenditures for Food Used at Home<sup>6</sup>**

As discussed in Chapter IV, Section A.1, we have concluded from our analysis of the money value of purchased food used at home per household that cash-out did not result in less spending for food used at home. Table V.1 shows that check households used purchased food at home worth an average of \$238.50 per month (\$55.46 per week), whereas coupon households used purchased food at home worth an average of \$235.84 per month (\$54.85 per week). Adjusting for household composition, check households used purchased food at home that was worth \$126.53 per

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<sup>5</sup>In this section, we use the AME measure of household size because our ultimate objective is to analyze total food expenditures (the sum of expenditures for food used at home and expenditures for food used away from home). In analyzing total food expenditures, it is neither useful nor desirable for the measure of household size to adjust for the proportion of meals eaten from the household food supply.

<sup>6</sup>The figures cited in this section for the money value of food used at home are simply the monthly counterparts to the figures cited in Chapter IV, Section A.1 (obtained by multiplying the weekly amounts by 4.3). Thus, we present no new information in this section. This section is necessary to completely describe the derivation of a measure of total monthly expenditures for food. That measure is the sum of monthly expenditures for food used at home (described in this section) and expenditures for food used away from home (described in the following section).

TABLE V.1  
EXPENDITURES FOR FOOD USED AT HOME AND FOOD USED AWAY FROM HOME

Measure of Food Expenditure	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Food Used at Home</b>					
Expenditure for food used at home (per household)	\$238.50	\$235.84	\$2.66	1.13	0.43
Expenditure for food used at home (per AME)	\$126.53	\$126.87	-\$0.34	-0.27	0.12
Percent of total food expenditures for food used at home	95.27	94.93	0.34	0.36	0.78
Percent of meals eaten at home	88.42	87.26	1.16	1.33	2.00
<b>Food Used Away from Home</b>					
Expenditure for food used away from home (per household)	\$14.13	\$15.07	-\$0.94	-6.27	0.63
Expenditure for food used away from home (per AME)	\$7.77	\$8.77	-\$1.00	-11.41	0.92
Percent of total food expenditures for food used away from home	4.73	5.07	-0.34	-6.73	0.78
Percent of meals eaten away from home					
--Paid for	11.58	12.74	-1.16	-9.09	2.00
--Free	2.95	3.16	-0.21	-6.60	0.75
	8.62	9.57	-0.95	-9.92	1.84
<b>Total Expenditures for Food</b>					
Sum of the expenditures for food used at home and expenditures for food used away from home (per household)	252.45	\$250.29	\$2.16	0.86	0.33
Sum of the expenditures for food used at home and expenditures for food used away from home (per AME)	\$134.75	\$135.74	-\$0.99	-0.73	0.31
<b>Sample Size</b>	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for (1) lower use of food at home and total expenditures for food by check recipients, and (2) greater use of food away from home by check recipients were performed on the check-coupon differences shown in this table.

Data are from the main questionnaire only.

AME = adult male equivalent.

month per AME, compared with \$126.87 for coupon households. The reduction of \$0.34 per month per AME is not statistically significant.

**b. Expenditures for Food Used Away from Home**

The analysis provides no evidence that cash-out led to an increase in expenditures for food used away from home. Table V.1 shows that check households spent an average of \$0.94 less per month per household for food used away from home than did coupon households (\$14.13 versus \$15.07). Accounting for differences in the ages and genders of household members, check households spent an average of \$1.00 less per month per AME for food used away from home than did coupon households (\$7.77 versus \$8.77). The lower reported spending on food away from home per household and per AME by check households relative to coupon households leads us to conclude that cash-out did not result in an increase in expenditures for food used away from home.

**c. Total Expenditures for Food**

Findings from the analysis of the household survey data indicate that cash-out did not lead to reductions in the total amount that participants in the FSP spent for food (including both food used at home and food used away from home). Check households spent slightly more (not less) per month per household for food than did coupon households (\$252.45 versus \$250.29; Table V.1). Adjustment for household size and composition results in a reversal of the sign of the estimated check-coupon difference in total expenditures for food. Table V.1 shows that check households spent \$0.99 less per month per AME for all food (\$134.75, versus \$135.74 for coupon households). However, this difference, which represents a reduction of less than 1 percent relative to the mean monthly expenditure for all food per AME under coupon issuance, is not statistically significant.

**d. Expenditures for Food by Urban and Rural Households**

Separate analyses of food expenditures by urban and rural households confirm the aggregate findings, presented in the preceding three subsections, that cash-out did not lead to reductions in

expenditures for food used at home or in total expenditures for food, nor did it lead to increases in expenditures for food used away from home (Appendix Tables J.6.A and J.6.B).

**e. Additional Findings**

Check and coupon households did not differ in the relative proportions of total food expenditures that were for food used at home and for food used away from home. For both check and coupon households, about 95 percent of food expenditures was for food used at home, and about 5 percent was for food used away from home (Table V.1). This pattern held for urban and rural households, as shown in Appendix Tables J.6.A and J.6.B.

There is no evidence from this analysis that cash-out led food stamp recipients to eat a greater percentage of their meals away from home. Table V.1 shows that check households were about 1 percentage point *less* likely than coupon households to eat meals away from home (11.58 percent versus 12.74 percent). This pattern also held for urban and rural households.

**2. Food and Nonfood Expenditure Shares**

Check and coupon households allocated the same share of total expenditures to food. Expenditures for all food items (purchased food used at home and purchased food used away from home) accounted for 43 percent of the total expenditures for both check and coupon households (Table V.2). Similarly, check and coupon households in urban and in rural locations devoted approximately 43 percent of their total expenditures to food (Appendix Tables J.7.A and J.7.B).<sup>7</sup>

The data from the main questionnaire indicate that in only one of nine broad nonfood consumption categories did the mean expenditure share of check households exceed that of coupon households at the 90 percent confidence level or higher.<sup>8</sup> Table V.2 shows that check households

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<sup>7</sup>The percentage of expenditures for food seems high, raising the question of whether there is a tendency in the data either for food expenditures to be over-reported or for other expenditures to be under-reported. Analysis of these issues is presented in Appendix H.

<sup>8</sup>We are counting the two components of "shelter" ("housing" and "utilities") as separate consumption categories.

TABLE V.2  
EXPENDITURE SHARES, BY BROAD CONSUMPTION CATEGORY  
(Percentage)

Consumption Category	Share of Total Expenditures		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
All Food	43.31	43.43	-0.12	-0.28	0.15
Food at home	41.34	41.27	0.07	0.17	0.09
Food away from home	1.98	2.17	-0.19	-8.77	0.94
All Shelter	33.98	32.80	1.18	3.59	1.53 <sup>†</sup>
Housing	14.16	14.04	0.12	0.93	0.21
Utilities	19.82	18.76	1.06	5.61	1.88 <sup>††</sup>
Medical	4.70	4.43	0.27	5.87	0.66
Transportation	8.28	8.60	-0.32	-3.72	0.72
Clothing	5.23	5.62	-0.39	-6.94	1.08
Education	1.02	1.26	-0.24	-19.05	1.91
Dependent Care	0.62	0.81	-0.19	-23.46	1.37
Recreation	1.47	1.61	-0.14	-8.70	0.89
Personal Items	1.39	1.43	-0.04	-3.50	0.42
Total	100.00	100.00			
Mean Total Expenditure	\$635.05	\$632.49			
Sample Size	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower expenditure shares for "all food" and "food at home" and for greater expenditure shares for other consumption categories among check recipients were performed on the check-coupon differences shown in this table.

Data are from the main questionnaire only.

<sup>†</sup>Statistically significant at the 90 percent confidence level, one-tailed test.

<sup>††</sup>Statistically significant at the 95 percent confidence level, one-tailed test.

allocated roughly 1 percentage point more of their expenditures to utilities than did coupon households (19.8 versus 18.8 percent). Further investigation would be required to substantiate this finding and to understand the behavior underlying the shift of expenditures to utilities.<sup>9</sup> For the remaining eight nonfood consumption categories, check households reported expenditure shares that were not significantly larger than those reported by coupon households (medical and housing expenses) or were smaller than those reported by coupon households (dependent care, recreation, clothing, transportation, and personal items).

Urban check households allocated significantly more of their expenditures to utilities than did urban coupon households (20.7 percent versus 19.0 percent). Among rural households, the check-coupon differential in utility expenditure shares was much smaller and was not statistically significant. Thus, it appears that greater spending on utilities by urban check recipients was responsible for the finding of a significantly greater share of expenditures on utilities among all check recipients. Rural check recipients allocated a significantly greater share of their total expenditures to dependent care than did rural coupon recipients (0.7 percent versus 0.4 percent), whereas the opposite was true for urban households.<sup>10</sup>

## **B. FOOD-SHOPPING PATTERNS**

In the next two subsections, we discuss findings based on data from the screener on check-coupon household differences in shopping patterns. The first subsection discusses differences in the types of stores at which food used at home was purchased; the second subsection discusses differences in the frequency with which the different types of stores were patronized. We discuss results for all households, as well as for urban and rural households.

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<sup>9</sup>Check recipients may have used their initial cash benefits to make payments on overdue utility bills (that is, on bills incurred when they were still receiving benefits in the form of coupons), rather than to actually increase their consumption of utilities.

<sup>10</sup>See Appendix Tables J.7.A and J.7.B for all of the urban and rural check-coupon household differences reported in this paragraph.

## **1. Types of Stores at Which Food Used at Home Is Purchased**

The differences between check and coupon households in the types of stores that were patronized to purchase food used at home were relatively minor. Table V.3 shows that, compared with coupon households, check households were 4.9 percentage points less likely to purchase food at grocery stores, 1.2 percentage points less likely to purchase food at specialty stores, and 0.8 percentage points more likely to purchase food at convenience stores. Only the check-coupon household difference for food purchases from grocery stores is statistically significant. The percentage of check and coupon households purchasing food at supermarkets did not differ. Ninety-nine percent of both check and coupon households purchased food from supermarkets during the month preceding the interview. In general, we observed similar patterns for urban and rural FSP participants.

## **2. Number of Shopping Trips per Month, by Type of Store**

Check and coupon households did not differ in the total number of shopping trips made in the month preceding the interview. Both check and coupon households reported making an average of about eight shopping trips during the month preceding the interview (Table V.3).

Check and coupon households did not differ substantially in the number of trips made to various types of stores.<sup>11</sup> Check households made an average of 0.2 more trips to supermarkets (4.2 trips versus 4.0 trips) and 0.3 fewer trips to grocery stores than did coupon households (2.3 trips versus 2.5 trips). However, neither difference is statistically significant at the 90 percent level, with a two-tailed test.

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<sup>11</sup>Note that the mean values for the number of trips, by type of store, shown in Table V.3 are calculated for all check and coupon households, rather than for those making at least one trip to a particular type of store under consideration.

TABLE V.3  
SHOPPING PATTERNS FOR FOOD USED AT HOME

	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Percentage of Households Using Type of Store</b>					
Supermarket	98.59	98.61	-0.02	-0.02	0.04
Neighborhood grocery store	37.72	42.59	-4.87	-11.45	2.38 **
Convenience store	23.16	22.31	0.85	3.77	0.48
Specialty store	25.89	27.13	-1.24	-4.57	0.67
<b>Number of Trips Past Month</b>					
Supermarket	4.17	3.96	0.21	5.30	1.39
Neighborhood grocery store	2.23	2.51	-0.28	-11.16	1.30
Convenience store	1.29	1.21	0.08	6.61	0.52
Specialty store	0.58	0.58	0.00	-0.00	0.03
All stores	8.24	8.23	0.01	0.12	0.02
<b>Sample Size</b>	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Two-tailed statistical tests were performed on all check-coupon differences shown in this table.

"Past month" is the month preceding the screening interview.

Data are from the screening interview.

\*\*Statistically significant at the 95 percent confidence level, two-tailed test.



## **VI. RECIPIENTS' ATTITUDES TOWARD AND EXPERIENCES WITH CASH-OUT**

Coupon benefits might place demands that some recipients perceive as making participation in the Food Stamp Program (FSP) burdensome or costly.<sup>1</sup> In states such as Alabama, where coupons are issued over-the-counter, recipients must make a monthly trip to food stamp issuance offices to pick up coupons; such a trip can entail out-of-pocket expenses for transportation or child care. Coupons, which can be used only at stores participating in the FSP, might limit the food-purchasing choices of recipients. In addition, recipients who use coupons must pay separately for the portions of their groceries that are food-stamp-eligible and for those that are not; the separate payments might increase the check-out times at the cash register. Finally, recipients who use coupons might feel stigmatized or embarrassed, because either the cashier or the recipient must detach the coupons from the coupon booklet, signalling to other patrons that the customer is a recipient of food stamps. Under cash-out, each of these burdens, or "costs," of program participation can be eliminated.

However, burdens or costs might also be associated with the use of check benefits. Two aspects of cash-out are of particular concern. First, under cash-out, recipients can use their benefits to purchase any good or service, thus raising concern that recipients will have greater difficulty budgeting food expenditures with check benefits than with coupons. Second, recipients might have problems cashing benefit checks (for example, some stores might refuse to cash the benefit checks) or might have to pay check-cashing fees.

This chapter uses data from the household survey and the focus group discussions to analyze recipients' attitudes toward and experiences with the check- and coupon-issuance systems in Alabama. For topics for which we have household interview data, the analysis entails presenting means and distributions of responses to questionnaire items separately for check and coupon recipients and then

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<sup>1</sup>The word "costly" is used in its broad economic sense. Direct monthly charges to program applicants and participants are prohibited by law.

comparing the responses. The focus group discussions provide useful information on and insights into the impacts of cash-out on several outcomes of interest, some of which are not addressed by the household survey. Because the results from the focus group discussions are based on a small number of nonindependent observations, they cannot support tests of hypotheses about recipient behaviors in any formal statistical sense. The analysis of the data obtained from the discussions is descriptive, and we include selected quotations in the text to highlight recipients' perceptions of cash-out.<sup>2</sup>

This chapter is organized into five sections. Section A describes the findings on what recipients like and dislike about receiving check and coupon benefits, on which benefit form they prefer, and on the reasons for their preferences. Section B discusses the findings on recipients' perceptions of the relative utility of coupon and check benefits in food budgeting and spending. Section C describes the experiences of check recipients when cashing benefit checks and discusses check-cashing fees. Section D discusses the time and money costs of program participation. Section E discusses the incentives provided by check benefits to apply for FSP benefits and to remain in the program, as reported by check recipients whose benefits have always been in the form of checks.

#### **A. RECIPIENTS' OPINIONS ABOUT BENEFIT CHECKS AND COUPONS**

The household survey asked the respondents to identify as many as four things that they thought were "good about receiving food stamp benefits in the form of checks" and as many as four that were "not good about check benefits." The survey obtained analogous information about coupons.<sup>3</sup> The results presented in Sections VI.A.1 and VI.A.2 are based on the responses of 1,255 check recipients and 1,131 coupon recipients to these questions.

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<sup>2</sup>See Appendix D for a discussion of the methodology used to conduct the focus group discussions.

In the four focus groups, a total of 28 recipients who had used both checks and coupons were asked which benefit form--checks or coupons--they preferred, and to give the reasons for their preferences. Section VI.A.3 presents the findings on preferences for checks or for coupons on the basis of the focus group discussions.<sup>4</sup>

To summarize the findings, responses to the survey questions on what is good and what is bad about benefit checks and coupons, as well as the evidence from the focus groups, indicate that check recipients who had used both checks and coupons favored checks, rather than coupons. The major reasons given by those participants for preferring check benefits were that the benefits could be used to purchase items other than food, that the recipients no longer had to make a trip to the food stamp issuance office to obtain their benefits, that checks reduced the stigma or embarrassment of program participation, and that checks made shopping easier.

#### **1. Recipients' Perceptions of What Is Good and Bad About Checks and Coupons**

All respondents to the household survey were asked what they thought was good and what was not good about checks and about coupons. Both check and coupon recipients gave very similar responses to these questions. The first subsection that follows discusses recipients' attitudes toward benefit checks. The second subsection describes attitudes toward coupons.

##### **a. Attitudes Toward Benefit Checks**

**What Is Good About Checks.** When asked what is good about check benefits, the feature that both check and coupon households mentioned most often was that check benefits could be used for nonfood expenses. Forty-three percent of check households and 39 percent of coupon households

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<sup>4</sup>We conducted two focus groups with food stamp recipients in Fayette County, one with elderly recipients (60 years of age or older), and one with nonelderly recipients (younger than 60 years of age). Two focus groups were conducted with recipients in Birmingham, one with elderly recipients, and one with nonelderly recipients. The discussions in Fayette County provided information on the experiences and opinions of elderly and nonelderly recipients residing in a rural area; those in Birmingham provided information on the experiences and opinions of elderly and nonelderly recipients from an urban area.

mentioned this benefit (Table VI.1). Unrestricted purchasing was also the feature most often cited by urban check and coupon recipients and by rural check and coupon recipients when asked what is good about check benefits (Appendix Table J.8). However, urban check households were 12 percentage points more likely than rural check households to cite this feature (49 percent versus 37 percent).

Check and coupon recipients also liked the fact that, under cash-out, food stamp benefits are delivered by mail. Sixteen percent of check households mentioned not having to go to the food stamp issuance office every month to pick up their benefits as a good thing about checks (Table VI.1). This response was the second most frequent response of check recipients to the question, "What is good about checks?" Seven percent of coupon households mentioned this feature as a good thing about checks. (This response was the fourth most frequent response of coupon recipients. "Do not know" and "nothing" were, respectively, the second and third most frequent responses of coupon recipients to the question.) Urban check households were somewhat more likely than rural check households to cite not having to make a trip to the issuance office to obtain benefits as an advantage of checks (19 percent versus 13 percent; Appendix Table J.8).

Assuming that responses in the categories "do not feel embarrassed," "allow you to feel dignified," and "no problems at the check-out line" all express the sentiment that cash-out eliminates the "stigma" of program participation, 10 percent of check recipients mentioned at least one reason related to the elimination of stigma when asked what is good about check benefits (results not shown); 5 percent of coupon recipients mentioned at least one reason related to the elimination of stigma.<sup>5</sup> Rural

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<sup>5</sup>Note that the percentage of check households mentioning a stigma-related reason (9.6 percent) is somewhat less than the percentage obtained by simply summing the percentages for the three categories (10.3 percent). The same relationship holds for coupon households (4.7 percent versus 5.2 percent). The former percentage is the correct one to report. One cannot simply sum the percentages of the individual categories; doing so would overstate the percentage of respondents holding this attitude, because respondents could mention as many as four things that they thought were good about checks.

TABLE VI.1

**RECIPIENTS' OPINIONS ON WHAT IS GOOD ABOUT FOOD STAMP PROGRAM CHECKS**  
(Percentage of Households)

What Is Good About Checks	Check Households			
	Converted to Checks	Checks Always	All Check Households	Coupon Households
Can be used for items other than food	42.7	47.0	42.9	39.4
Do not have to go to the issuance office	17.0	9.7	16.2	6.9
Have more choices of food stores	5.8	6.0	5.7	4.0
Do not stand in line for a long time	5.5	3.7	5.3	2.5
More convenient to use/easier to spend	5.3	4.5	5.3	2.5
Do not feel embarrassed	5.0	7.5	5.3	2.8
Can budget food expenses better	3.3	3.0	3.3	1.0
No problems at the check-out line	3.0	2.2	2.9	1.1
Give more control over the household budget	2.3	3.0	2.4	1.9
Allow you to feel dignified	2.0	1.5	2.1	1.2
Are not difficult to cash	1.7	3.0	1.8	0.4
Make sure benefits are spent on food	1.4	3.0	1.6	0.4
Need benefits to survive	1.1	2.2	1.2	0.6
Are less likely to be stolen	1.1	0.0	1.0	0.5
Benefits in cash	0.6	0.0	0.6	0.7
Issued the same time each month	0.5	0.0	0.5	0.0
ATPs are never late	0.5	0.0	0.5	0.0
Do not go to post office to pick them up	0.5	0.0	0.5	0.1
ATPs are never stolen	0.2	0.0	0.2	0.0
Allow you to save money	0.3	0.0	0.2	0.1
Less apt to missplace or lose	0.2	0.0	0.2	0.2
Other	1.7	0.7	1.6	2.4
Nothing	9.4	6.0	9.1	14.9
No comment/no opinion	3.9	5.2	4.0	5.0
Refused	0.2	0.0	0.2	0.7
Do not know	5.0	6.0	5.2	19.2
Number of Households	1,111	134	1,255	1,131

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Percentages do not sum to 100 percent because respondents could mention more than one thing that they thought was good about check benefits.

Sample sizes of "Converted to Checks" and "Checks Always" households do not sum to sample size of "All Check Households" because the status of ten households could not be determined.

ATP = authorization-to-participate card.

check households were more likely than urban check households to cite this feature as an advantage of check benefits. Twelve percent of rural check recipients mentioned at least one reason related to the elimination of stigma, compared with 7 percent of urban check households (results not shown).

Check recipients also mentioned unrestricted food-purchasing locations and convenience as advantages of check benefits. Six percent of check recipients cited having more choices of food stores as a good thing about checks (Table VI.1). Five percent of check recipients mentioned that checks were more convenient than coupons to use. In addition, 5 percent of check recipients mentioned not having to stand in line for long at issuance offices as a good thing about check benefits.

**What Is Not Good About Checks.** "Nothing" was the most frequent response of check recipients to the question, "What is not good about checks?" and the second most frequent response of coupon households. Forty-four percent of check households and 19 percent of coupon household gave this response (Table VI.2). The responses of urban and rural households followed the same pattern (Appendix Table J.8). Check recipients who had always received their benefits in the form of checks were less likely than recipients whose benefit form had been converted from coupons to checks to find fault with check benefits; 52 percent of checks-always recipients responded "nothing," compared with 43 percent of converted-to-checks recipients.

Check and coupon recipients generally agreed about the features of check benefits that they perceived as not good. When we asked recipients what they thought was not good about check benefits, 13 percent of check households mentioned that checks do not ensure that FSP benefits are spent on food. Coupon households were more concerned than check households about the potential diversion of cash benefits from food to other household expenses; coupon households were more than twice as likely (31 percent versus 13 percent) to mention this feature when asked what is not good

TABLE VI.2

**RECIPIENTS' OPINIONS ON WHAT IS NOT GOOD ABOUT FOOD STAMP PROGRAM CHECKS**  
(Percentage of Households)

What Is Not Good About Checks	Check Households			Coupon Households
	Converted to Checks	Checks Always	All Check Households	
Do not make sure benefits are spent on food	13.0	11.2	12.7	31.2
Do not budget food expenses as well	6.1	1.5	5.7	2.6
Need to pay a fee to cash checks	5.0	3.7	4.9	4.5
Forced to pay higher prices	3.8	4.5	4.0	6.3
Can be used for items other than food	3.3	3.7	3.4	6.0
Not enough benefits to buy things	2.5	3.0	2.5	0.4
Give less control over household budget	2.4	0.7	2.2	1.5
Cash is used to buy alcohol/cigarettes	1.9	0.7	1.8	3.4
Have been late	1.4	0.7	1.4	0.0
Are difficult to cash	1.3	0.7	1.2	1.7
Cash is used to buy drugs	1.4	0.0	1.2	2.3
Checks have less value than food stamps	1.1	1.5	1.1	1.1
Are more likely to be stolen	1.1	0.7	1.0	0.7
Easy to misplace or lose	0.4	0.0	0.3	0.4
Too much money to carry around	0.4	0.0	0.3	0.0
Have been stolen	0.1	0.7	0.2	0.2
Dissatisfied with Food Stamp Program	0.1	0.7	0.2	0.1
Inconvenient/not easy to cash or redeem	0.2	0.0	0.2	0.4
Difficult to budget/issued first of month	0.3	0.0	0.2	0.2
Cause problems in the checkout line	0.3	0.0	0.2	0.1
Have fewer choices of food stores	0.1	0.0	0.1	0.1
Feel embarrassed	0.1	0.0	0.1	0.1
Do not feel dignified	0.1	0.0	0.1	0.1
ATPs have been stolen	0.1	0.0	0.1	0.2
Other	3.7	3.7	3.7	2.7
Nothing	43.4	52.2	44.2	19.0
No comment/no opinion	2.1	3.7	2.3	1.9
Refused	1.7	0.7	1.6	1.6
Do not know	7.9	9.0	8.0	18.3
Number of Households	1,111	134	1,255	1,131

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Percentages do not sum to 100 percent because respondents could mention more than one thing that they thought was not good about check benefits.

Sample sizes of "Converted to Checks" and "Checks Always" households do not sum to sample size of "All Check Households" because the status of ten households could not be determined.

ATP = authorization-to-participate card.

about benefit checks. Urban and rural coupon recipients were also twice as likely as urban and rural check recipients to cite this feature (Appendix Table J.8).

If we assume that responses in the categories "do not make sure benefits are spent on food," "can be used for items other than food," "cash is used to buy drugs," and "cash is used to buy alcohol/cigarettes" express the sentiment that cash-out makes it less likely that benefits will be spent on food, then 18 percent of check respondents and 41 percent of coupon respondents mentioned at least one reason related to the diversion of benefits from food to nonfood goods and services (results not shown). Check households whose benefits had been converted from coupons were only slightly more likely than checks-always households to cite this characteristic of cash-out as a bad thing (18 percent versus 16 percent).

The only other feature of check benefits that appeared to concern a significant number of recipients is the effect of the benefit form on budgeting food expenditures. However, only a relatively small minority of check and coupon households, 6 percent and 3 percent, respectively, mentioned not being able to budget food expenses as well with checks as with coupons (Table VI.2).

#### **b. Attitudes Toward Coupons**

In general, the responses to the question, "What is good about coupons?" were the same as the responses to the question, "What is not good about checks?" Similarly, recipients' responses to the question, "What is not good about coupons?" were the same as those to the question, "What is good about checks?" We discuss the responses of check and coupon recipients to the questions about what is good and not good about coupons in the next two subsections.

**What Is Good About Coupons.** The feature of coupon benefits that check and coupon households liked most is that coupons make it more likely that FSP benefits will be spent on food. Twenty-six percent of check households and 38 percent of coupon households mentioned this feature (Table VI.3). The percentages of urban and rural check and coupon households, respectively, citing



TABLE VI.3

**RECIPIENTS' OPINIONS ON WHAT IS GOOD ABOUT FOOD STAMP PROGRAM COUPONS**  
(Percentage of Households)

What Is Good About Coupons	Check Households			Coupon Households
	Converted to Checks	Checks Always	All Check Households	
Make sure benefits are spent on food	26.6	23.9	26.2	37.8
No taxes charged	17.6	17.2	17.8	25.8
Can budget food expenses better	12.1	5.2	11.2	12.6
Cannot be used for items other than food	6.0	8.2	6.3	8.8
Give more control over the household budget	5.1	2.2	4.9	5.1
Need benefits to survive	4.6	2.2	4.3	4.6
Get higher dollar value with stamps	2.4	2.2	2.4	2.3
More convenient/easier to spend	1.4	0.7	1.3	1.2
Do not need to pay a fee	1.2	0.7	1.1	1.1
Can be used for items other than food	0.9	0.7	0.9	1.1
ATPs are never late	0.5	0.7	0.6	0.2
Issued the same time each month	0.5	0.7	0.6	0.1
More choices of food stores	0.6	0.0	0.6	0.4
Are less likely to be stolen	0.5	0.0	0.5	0.4
Are not difficult to cash	0.5	0.0	0.5	0.6
No problems at the checkout line	0.3	0.7	0.3	0.3
Do not have to carry cash	0.4	0.0	0.3	0.3
Cannot be used to buy alcohol/cigarettes	0.1	1.5	0.2	0.4
Allow you to save money	0.3	0.0	0.2	0.1
Do not feel embarrassed	0.2	0.0	0.2	0.1
Acceptable in most stores	0.1	0.0	0.2	0.0
Do not stand in line for a long time	0.3	0.0	0.2	0.0
Hard to sell	0.1	0.0	0.1	0.2
Cannot be used to buy drugs	0.0	0.7	0.1	0.0
ATPs are never stolen	0.1	0.0	0.1	0.3
Other	1.5	0.0	1.4	1.1
Nothing	12.4	12.7	12.4	3.4
No comment/no opinion	3.3	5.2	3.5	2.2
Refused	1.3	2.2	1.4	0.5
Do not know	6.6	16.4	7.6	4.5
Number of Households	1,111	134	1,255	1,131

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Percentages do not sum to 100 percent because respondents could mention more than one thing that they thought was good about coupon benefits.

Sample sizes of "Converted to Checks" and "Checks Always" households do not sum to sample size of "All Check Households" because the status of ten households could not be determined.

ATP = authorization-to-participate card.

this feature are virtually identical to the percentages of all check and coupon households (Appendix Table J.8).

The second most commonly cited benefit by both check and coupon households was that households do not have to pay sales taxes on food that is purchased with food stamps. Eighteen percent of check recipients, compared with 26 percent of coupon recipients, gave this response (Table VI.3). Urban check and coupon recipients were between 3 and 5 percentage points more likely than their rural counterparts to cite this feature as a good thing about coupons (Appendix Table J.8). Although fewer check recipients than coupon recipients gave this response, many check and coupon recipients apparently did not know that check recipients received higher FSP benefits to offset the sales tax that they had to pay.<sup>6</sup>

Easier budgeting of household food expenses was another advantage of coupons cited by both check and coupon recipients. Eleven percent of check households and 13 percent of coupon households reported that they were able to budget food expenses better with coupons than with checks (Table VI.3). Twelve percent of households whose benefits had been converted from coupons to checks cited this feature, compared with 5 percent of checks-always households. Urban check and coupon recipients were more likely than their rural counterparts to cite this feature as a good thing about coupons (Appendix Table J.8).

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<sup>6</sup>In Alabama, a sales tax is charged on cash purchases, but not on coupon purchases. The state sales tax rate in Alabama is 4 percent. However, counties and municipalities can impose additional sales taxes. The cumulative sales tax rate for 7 of the 12 counties participating in the demonstration equaled 7 percent; for the remaining 5 counties, the cumulative sales tax rate equaled 8 percent. The Alabama Department of Human Resources added a 7 percent sales tax offset to the FSP benefits of check recipients. Thus, in 7 of the 12 counties participating in the demonstration, check recipients were compensated exactly for the sales tax; in the remaining 5 counties, relative to coupon recipients, check recipients experienced a 1 percent reduction in their benefits.

**What Is Not Good About Coupons.** "Nothing" was the most frequent response of both check and coupon recipients to the question, "What is not good about coupons?" Thirty-four percent of check households and 40 percent of coupon household gave this response (Table VI.4). This pattern held for urban and for rural check and coupon households. Check recipients whose benefit form had been converted from coupons to checks were 7 percentage points more likely than checks-always recipients to find no fault with coupon benefits (35 percent and 28 percent, respectively).

In general, check households and coupon households thought the same features of the coupon issuance system were not good. In addition, urban and rural residents gave substantially the same responses. The feature cited most often as not good about coupons, by 19 percent of check households and by 21 percent of coupon households, is that FSP coupon benefits cannot be used to purchase nonfood items. Check and coupon households also did not like to have to travel to the issuance office to obtain food stamp benefits. Ten percent of check households and 7 percent of coupon households mentioned this feature as one that they disliked about coupon benefits.

The "stigma" experienced by participants when using their benefits to purchase food is another aspect of coupons perceived by check and coupon households as not good. Assuming that responses in the categories "feel embarrassed," "do not feel dignified," and "cause problems at the check-out line" all refer to the stigma of program participation, 7 percent of check households and 6 percent of coupon households mentioned the stigma that they felt when using food stamps as a feature that they disliked about coupon benefits.

## **2. Indices of Recipients' Attitudes Toward Benefit Checks and Coupons**

The household survey did not ask recipients directly which benefit form--checks or coupons--they preferred. However, we used the number of reasons given by a respondent for why checks or coupons are good or are not good to construct two indices, one measuring the respondent's attitudes toward checks, and one measuring the attitudes toward coupons. The indices can be used to provide evidence about whether recipients prefer checks or coupons.

TABLE VI.4  
 RECIPIENTS' OPINIONS ON WHAT IS NOT GOOD  
 ABOUT FOOD STAMP PROGRAM COUPONS  
 (Percentage of Households)

What Is Not Good About Coupons	Check Households			Coupon Households
	Converted to Checks	Checks Always	All Check Households	
Cannot be used for items other than food	19.0	23.1	19.4	21.2
Involve going to issuance office	10.1	6.0	9.6	7.5
Need to stand in line for a long time	5.0	3.0	4.7	3.7
Feel embarrassed	4.1	6.7	4.4	4.8
Have fewer choices of food stores	2.5	2.2	2.5	1.5
Cause problems at the check-out line	1.9	2.2	2.0	1.1
Do not feel dignified	1.4	1.5	1.4	0.7
Are more likely to be stolen	1.2	0.0	1.0	0.4
Do not make sure benefits are spent on food	1.1	0.7	1.0	1.7
Do not budget food expenses well	0.9	0.7	0.9	0.5
Give less control over household budget	0.5	0.7	0.6	0.5
Are difficult to cash	0.5	0.7	0.5	0.0
Have been stolen	0.5	0.0	0.4	0.2
Have been late	0.4	0.0	0.3	0.2
ATPs have been late	0.4	0.0	0.3	0.4
ATPs have been stolen	0.1	0.7	0.2	0.1
Cannot be used to buy alcohol/cigarettes	0.0	0.0	0.0	0.0
Other	3.2	3.7	3.3	3.2
Nothing	35.0	27.6	34.3	40.1
No comment/no opinion	2.3	3.0	2.3	3.0
Refused	1.7	1.5	1.7	1.2
Do not know	9.8	17.9	10.6	7.3
Number of Households	1,111	134	1,255	1,131

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Percentages do not sum to 100 percent because respondents could mention more than one thing that they thought was not good about coupon benefits.

Sample sizes of "Converted to Checks" and "Checks Always" households do not sum to sample size of "All Check Households" because the status of ten households could not be determined.

ATP = authorization-to-participate card.

The index of attitudes toward checks is simply the number of reasons cited by a respondent for why checks are good, minus the number of reasons cited for why checks are not good. Therefore, a positive value of the index indicates that the respondent cited more good things than bad things about checks. Conversely, a negative value indicates that the respondent cited more bad things. A respondent who cited an equal number of good and bad aspects of checks would have an index value equal to zero. We used the same procedure to construct the index of attitudes toward coupons. The interpretation of that index is analogous to the interpretation of the check index. To simplify the findings that are based on the indices, we have collapsed their values into three categories: (1) positive, (2) neutral (zero), and (3) negative.

When examining tabulations of these indices, it is important to recognize that we cannot be certain of the degree to which the indices reflect respondents' overall preferences for cash or for coupons. For example, suppose that a respondent noted three advantages of checks, but only one disadvantage. Implicitly, our index assumes that the responses indicate an overall positive attitude toward checks. However, it is possible that the respondent could have viewed the single disadvantage to be so serious as to outweigh the three advantages.

Nevertheless, we believe that the indices provide meaningful information about respondents' attitudes toward checks and coupons. In part, as discussed in the following subsection, we base our belief on the fact that the findings obtained from the indices are broadly consistent with the findings obtained from the focus group discussions.

**a. Attitudes of Check Recipients Toward Benefit Checks and Coupons**

A majority of check recipients cited more reasons why checks are good than why they are not good. Table VI.5 shows that 59 percent of check recipients cited more reasons why checks are good than reasons why checks are bad, whereas only 13 percent cited more reasons why checks are bad. Twenty-eight percent cited an equal number of good and bad things about checks. Check recipients were less positive toward coupons than toward checks. Forty-nine percent of check recipients cited

**TABLE VI.5**  
**INDICES OF RECIPIENTS' ATTITUDES TOWARD CHECKS AND COUPONS**  
**(Percentage of Households)**

Scale	Attitudes Toward Checks		Attitudes Toward Coupons	
	Check	Coupon	Check	Coupon
Positive <sup>a</sup>	59.2	33.1	49.0	61.4
Neutral <sup>b</sup>	28.3	37.9	34.9	31.2
Negative <sup>c</sup>	12.5	29.0	16.1	7.4
Total Percent	100.0	100.0	100.0	100.0

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

<sup>a</sup>Positive attitude means respondent said more good things than bad things about benefit form.

<sup>b</sup>Neutral attitude means respondent said equal number of good and bad things about benefit form.

<sup>c</sup>Negative attitude means respondent said fewer good things than bad things about benefit form.

more good than bad things about coupons, 35 percent cited an equal number of good and bad things, and 16 percent cited more bad than good things.

Rural check recipients were more likely than urban check recipients to view checks and coupons positively. Sixty-three percent of rural check recipients mentioned more reasons why checks are good than why they are not good, compared with 55 percent of urban check recipients; 52 percent of rural check recipients cited more reasons why coupons are good than why they are bad, compared with 46 percent of urban check recipients (results not shown).

#### **b. Attitudes of Coupon Recipients Toward Benefit Checks and Coupons**

As measured by our index, the attitudes of coupon recipients toward checks are much more evenly distributed across the "positive-neutral-negative" categories than are their attitudes toward coupons. Table VI.5 shows that only about one-third of coupon recipients cited more reasons why checks are good than why they are not good; 29 percent cited more reasons why checks are bad than why checks are good; and 38 percent cited an equal number of good and bad things. However, sixty-one percent of coupon households cited more reasons why coupons are good than why they are bad. Thirty-one percent cited an equal number of good and bad things, and only 7 percent cited more bad things.

Rural coupon recipients were more likely than urban coupon recipients to view checks and coupons positively. Thirty-seven percent of rural coupon recipients mentioned more reasons why checks are good than why they are not good, compared with 29 percent of urban coupon recipients; 66 percent of rural coupon recipients cited more reasons why coupons are good than why they are bad, compared with 46 percent of urban check recipients (results not shown).

#### **c. Conclusions**

As measured by our index, recipients' relative preferences for checks or for coupons are related to the form of benefit that they were receiving when we conducted the survey. We estimate that

nearly four and one-half times as many check recipients had a net positive attitude toward checks than had a net negative attitude (59 percent versus 13 percent). In addition, our results suggest that check recipients were 10 percentage points more likely to have a net positive attitude toward checks than to have a net positive attitude toward coupons (59 percent versus 49 percent). Although more coupon recipients had a net positive attitude toward checks than had a net negative attitude (33 percent versus 29 percent), the difference is small; moreover, coupon recipients were much more likely to have a net positive attitude toward coupons than to have a net positive attitude toward checks (61 percent versus 33 percent).

When interpreting these results, note that the coupon households had not received FSP benefits in the form of checks.<sup>7</sup> The lack of direct experience with check benefits might have prevented these respondents from having clearer opinions about check benefits.<sup>8</sup> Of the check recipients whose benefit form had been converted from coupons and who, therefore, had experience with both forms of issuance, 58 percent had positive attitudes toward checks and 49 percent had positive attitudes toward coupons.

### **3. Additional Findings from Focus Group Discussions**

In the focus groups, we asked recipients who had used both checks and coupons to indicate which benefit form they preferred, and to give the reasons for their preferences. In general, the focus group participants preferred checks to coupons because (1) checks can be used to purchase nonfood items, (2) checks are more convenient to receive, (3) checks engender a feeling of self-respect, (4) checks increase purchasing flexibility and make budgeting and shopping easier, and (5)

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<sup>7</sup>Interviewers briefly informed respondents from coupon households about the check-issuance system, so that the respondents could give informed answers about what is good and not good about checks. However, experience using check benefits is a better source of information than is the simple knowledge of the existence of such an issuance system.

<sup>8</sup>Evidence from the survey supports this view. Nineteen percent of coupon households responded



checks are typically received earlier in the month than coupons. The major reservation about check benefits concerned the diversion of benefits from food to nonfood items. Some participants expressed trepidation that they, or families with small children, would spend too much of the check allotment on nonfood items.

Many participants preferred checks because they would be able to buy nonfood items, such as soap and paper products. In addition, some recipients liked being able to buy food from places other than retail food stores, such as farmer's markets or fast food restaurants, to which they would be able to take their children. Some examples of what focus group participants said are:

*"I like the fact that I can buy more nonfood items like toilet tissue and washing powder and soap. Otherwise, I'd have to do without them and that is almost as essential as food to me."* (Birmingham/Elderly)

*"It seems like it's a bit easier because you can purchase nonfood items [with checks], but with food stamps you just get food with them."* (Fayette/Nonelderly)

*"Like on the weekend, you know, we have the kids, you know, we leave church, the kids, they might want to stop by McDonalds. Well, with the stamps we can't go in there and spend them. See, like now, you might stop by McDonalds, stop by Jacks, and you know, take them out some nights to eat. But with stamps you can't do that."* (Fayette/Nonelderly)

*"A lot of people sell vegetables. Like you see a truck stopped and they're selling watermelons and stuff, you can go ahead and pay cash for it instead of knowing they ain't gonna take the food stamps."* (Fayette/Nonelderly)

Many participants also preferred checks to coupons because receiving checks by mail is more convenient and less costly than having to report to food stamp offices in-person to pick up coupons. This preference was particularly true for the elderly, those with no transportation, and those with small children. Focus group participants said:

*"Because I'm not able to go to and from, I'm a heart patient. So I like them to send me a check so I don't have to be standing....I had to get the bus. You had to pay to go downtown and then get a transfer back. I always tried to get somebody to take me. I hate to travel alone by myself."* (Birmingham/Elderly)

*"But the most important thing was that it did come to my mailbox. I cannot drive a car. I don't have a car and it was a, constantly, get somebody to pick them up, get somebody to carry [take] me and I think it was wonderful that it do come to my house." (Fayette/Elderly)*

*"I was glad because in the cold months having to get my little girl dressed, and myself, and going down and get the stamps....it's better because you don't have to get out of the house, getting dressed just to come down to get the coupons when you can just get it in the mail. So that's a whole lot easier." (Fayette/Nonelderly)*

*"Also, somebody can go cash your check for you and go get your groceries. She can't go pick up my stamps because, you know, her name's not on them." (Fayette/Nonelderly)*

Participants in the focus groups also cited the elimination of the stigma or embarrassment associated with using FSP benefits as a reason for preferring checks to coupons. Recipients reported that the behavior of store personnel and customers improved when the food stamp recipients offered checks as payment, rather than coupons. When recipients paid with checks, they rarely received verbal abuse from customers and store personnel at the checkout counter, because these individuals could not easily ascertain that the FSP had issued the food stamp check. Recipients also reported that they felt greater self-esteem when using checks than when using coupons. Some examples of what participants said about how cash-out eliminated the stigma associated with participation in the FSP, and about how it increased self-esteem are:

*"Sometimes, they don't even say thank you [with coupons]. And one time I had, you know, you go in with stamps and the girl had charged me fifty cents more and I told her and she said, 'well, you're getting it free anyway.' When you get the checks, I mean it's different, they treat you different." (Fayette/Nonelderly)*

*"I had this comment behind me from this lady, 'look at this girl on food stamps and she's getting a roast'....I turned around and said, 'lady, this little roast is gonna take me for 3 or 4 meals. How many meals does it take you?'....That roast, which was \$7.00, lasted...and it was more economical to get that than it would have been to get hamburger meat." (Birmingham/Nonelderly)*

*"You go up there with a big bag of groceries and you pull them food stamps out, they say, 'no wonder she's got that much groceries, she's getting food stamps'. When you pull the money out, their eyes close up." (Fayette/Nonelderly)*

*"Mine [preferred reason for getting checks] is for more respecting at the grocery store, you know, the way the cashiers treat you different. People looking at you." (Fayette/Nonelderly)*

*"I don't feel guilty--everybody has to go up to a cash register, you know--like so many wise cracks about people on food stamps, you know...you can spend money instead of the food stamps. It makes me feel better to be able to do that." (Fayette/Nonelderly)*

Although the support for checks was overwhelming, some participants, especially older ones, expressed reservations about giving checks to families with small children. Participants worried that children would be deprived of the food that they would have received had their parents been given coupons. Some participants said that they would be willing to receive coupons instead of checks, despite the personal hardship such a change would cause, if coupons would ensure that small children received enough food. Some examples of what focus group participants said are:

*"You mean if we had to choose [between checks and stamps] for everybody? Well, I believe the food stamps would be more benefit on account of there's so many little children wouldn't get anything if they got checks." (Fayette/Elderly)*

*"That's how I feel. I don't know how you all feel, but, I would be willing to try to get my food stamps, you know, if I could get some for little children. If a family got the big check in money and the little children might get some and they might not. But if they get food stamps, you see...But for myself, I'd rather get my check." (Fayette/Elderly)*

## **B. THE UTILITY OF CHECKS AND COUPONS IN FOOD BUDGETING AND SPENDING**

Coupons are an "in-kind" benefit that can be legally redeemed only for eligible food items, whereas check benefits can be legally converted to cash and used to purchase either food or nonfood goods and services. Therefore, converting the form of the benefit from coupons to checks could make it more difficult for recipients to budget their food expenditures, because food stamp benefits are no longer linked directly to the purchase of food.

To assess the impact of cash-out on budgeting food expenditures, we obtained data from both the household survey and the focus group discussions on recipients' relative *perceptions* about the usefulness of checks and coupons in budgeting food expenses. In the household survey, we asked all recipients whether they thought coupon benefits or check benefits were more helpful when

planning and budgeting monthly food expenses.<sup>9,10</sup> The focus groups with recipients who had used both coupon benefits and check benefits explored the role of checks and coupons in household budgeting more deeply, as well as recipients' perceptions about the relative utility of checks and coupons when planning and budgeting the household's monthly food expenses. The first section describes the findings on budgeting food expenses that are based on the household survey, and the second describes the findings that are based on the focus group discussions.

To summarize the results, in the household survey, a slim majority of check recipients and the vast majority of coupon recipients agreed with the statement that "food stamps are more helpful than checks in planning and budgeting the household's monthly food expenses." However, the majority of focus group participants who had received both benefit forms preferred checks when budgeting food expenses. Most of the participants in the focus groups believed that budgeting household expenditures, including those for food, or household resources was easier with benefit checks than with coupons. The major reason that focus group participants preferred checks to coupons when budgeting expenditures was that recipients felt they were better shoppers with check benefits than

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<sup>9</sup>Respondents were asked whether they strongly agreed, agreed, disagreed, or strongly disagreed with the following statement: "Food stamp coupons are more helpful than food checks in planning and budgeting the household's monthly food expenses." All respondents to the household survey were asked this question, irrespective of whether they received checks or coupons. Respondents who did not receive check benefits were briefly informed about the check-issuance system. However, we believe that, as an information source, experience with check benefits is better than knowledge of the existence of such an issuance system. (An examination of the percentage of check and coupon households responding "don't know" to this question supports this belief, as coupon households were twice as likely as check households to respond "don't know.") Therefore, we focus our discussion on the responses to this question by check recipients who had formerly received coupon benefits.

<sup>10</sup>All household survey respondents were also asked whether they strongly agreed, agreed, disagreed, or strongly disagreed with the statement: "Food stamp coupons give more control than a food check over the household's food spending." However, we believe there to be sufficient ambiguity in the meaning that respondents might have applied to the word "control" to cast doubt on the question's validity. Some households might have thought in terms of "federal government" control over the household's food expenses, because the question does not define *who* has more control. The ambiguity could have been avoided if "give more control" had read "give *the household* more control." For this reason, the discussion in Section VI.B.1 focuses on the responses to the question about budgeting the household's monthly food expenses.

with coupons. Recipients felt that they were more likely to make economical purchases with checks than with coupons, and that this freed up resources for nonfood expenditures.

### **1. Household Survey Findings on Budgeting Food Expenses**

Both check and coupon recipients believed that it was easier to budget food expenses with coupons than with checks; however, a substantially smaller percentage of check recipients than coupon recipients held this opinion. Fifty-two percent of check households either strongly agreed or agreed with the statement that "food stamp coupons are more helpful in planning and budgeting the household's monthly food expenses," compared with 79 percent of coupon households (Table VI.6). Urban check households were slightly more likely than rural check households to have this opinion; 57 percent of urban check households either strongly agreed or agreed with the statement, compared with 49 percent of rural check households (results not shown).

None of the coupon households in our sample had actual experience budgeting food expenditures with check benefits. In addition, check households who were first-time participants in the FSP lacked experience with coupons. Thus, we can appraise recipients' relative preferences for checks or coupons in planning and budgeting food expenditures more accurately by examining the responses of the subgroup of check households that had formerly received coupon benefits. Table V.6 shows that, as with all check households, a slight majority of recipients who had experience with both benefit forms believed that food expenditures are more easily budgeted with coupons than with checks; 53 percent strongly agreed or agreed with the statement.

### **2. Additional Findings from the Focus Group Discussions on Budgeting Food Expenses**

In the focus group discussions with recipients who had received both check and coupon benefits, we asked participants to discuss the relative utility of checks and coupons in budgeting household expenditures. We first asked participants to compare their actions after receiving benefit checks

TABLE VI.6  
ATTITUDES ABOUT THE ROLE OF CHECKS VERSUS COUPONS  
IN FOOD BUDGETING AND SPENDING  
(Percentage of Households)

Attitude	Check Households				Coupon Households
	Converted to Coupons	Checks Always	All Check Households		
Food Stamp Coupons Are More Helpful in Planning and Budgeting the Household's Monthly Food Expenses					
Strongly agree	19.3	15.7	19.2	31.7	} 79.4
Agree	33.5	27.8	33.0	47.7	
	} 52.8		} 43.5		
Disagree	39.7	44.4	39.9	17.6	} 20.7
Strongly disagree	7.5	12.0	7.9	3.1	
	} 47.2		} 47.8		
Sample Size	1,027	108	1,144	982	

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Percentages were computed on the basis of only those households that expressed an opinion.

Sample sizes of "Converted to Checks" and "Checks Always" households do not sum to sample size of "All Check Households" because the status of nine households could not be determined.

(including how they decide what to do with the money, and who makes the decisions) with those after receiving benefit coupons. We then asked whether it was easier to budget the household's food expenditures with checks or coupons, and why.

The concept of household budgeting generated lively discussion among the participants. One group indicated that the concept was ludicrous, because FSP recipients, who do not have enough income to meet their needs, can only do their best to try to make ends meet. Another group reported buying certain items every week, so that it would not matter whether coupons or checks were used. A third group, comprised mostly of younger recipients, stated that budgeting was definitely done differently with checks than with coupons. These recipients felt that, with checks, they were more aware of making wise purchases in order to stretch their money further. With checks, they were more cognizant of price differences between name brands and generic products. They were more likely to select products that gave them good value for the money. Nonelderly focus group participants said:

*"The way I look at it is when you have the coupons you have to get food and so that's why you go in the store and get anything you want, no matter how much it costs, because you have to get food. With the check, it's the temptation of knowing you can get something cheap and you might have extra money left over." (Fayette/Nonelderly)*

*"Well, to me it's just natural. You hold onto a dollar bill more than you hold onto a dollar coupon....You just treat money different....if something costs \$10.00 you're gonna say 'well, I've got some stamps, I'll use them'. You make more wiser decisions with money. If these pork chops cost this much and these lamb chops are cheaper, I'm gonna get the cheaper ones. You make wiser decisions." (Fayette/Nonelderly)*

*"When I had the food stamps, the coupons, I go in the store and everything I see my kids want. I really didn't worry about the prices, I wasn't too particular about that. Now with the check, I look for the cheapest stuff to make my money last a long time. I used to go in there and get anything I see." (Fayette/Nonelderly)*

*"Whatever they got on sale I usually get. Everything I got or buy is generic. I try to make it last, you know, if you buy the cheaper brand you get more. If any of my brothers are over, or something, I can rely on them to go into Tuscaloosa, or somewhere. I'll ride with them and the food over there and stuff is a lot cheaper than what it is around here." (Fayette/Nonelderly)*

All of the women in the rural and urban groups made the food-purchasing decisions in their households under both the check- and coupon-issuance systems, even those who were part of a male-female couple. Some of the women observed that they were able to have other family members, including children, cash their checks and shop for them, which they were unable to do with food coupons. An example of what focus group participants said was:

*"In my house, even though every check that comes into my house is in my husband's name, I sign his name, I sign my name, I pay the rent, I pay all the bills. I do everything and I slip, like \$10 a week in his allowance, that's it!"* (Birmingham/Nonelderly)

In general, participants felt confident of their ability to handle money and did not think that training on household budgeting would be beneficial. Most of them knew how to get a lot of mileage from their funds, apparently as a result of their lack of discretionary income. Food stamp recipients do not have a lot of choices. They know what their financial obligations are, they know what income is available, and they know that there is not much, if anything, left over, after necessities have been purchased.

*"It's like I was saying, my budget is in my head. I know what I've got coming in and I can't go over that."* (Birmingham/Elderly)

*"I don't get extravagant. Sometimes I think, hey, I got half a tube of toothpaste at home, let me try to stretch it. And now since I've got that check, I might buy that tube of toothpaste. That's what I'm saying is the difference. I might buy that tube of toothpaste even though I have half a tube of it. That's about the only variance."* (Birmingham/Elderly)

However, even those who supplemented their food stamp benefits with money that they obtained from other sources experienced difficulty making food, or money to buy food, last for the entire month. With checks, a few participants shopped more frequently for smaller quantities of food, rather than shopping once at the beginning of the month. Others continued to purchase most of their food at one time, because it was easier to budget the money with that method. However,



regardless of which shopping method was used, most stated that they did not have enough food, or money to buy food, at the end of the month. Focus group participants said:

*"I tried spending it separately, week by week...it was worse than doing it [shopping] all at the beginning of the month...trying to divide it up and seeing the money disappear. [If] my kids' got to go to the doctors and I got to get gas in my car to take them there, I've got to do it. It's either put \$5.00 worth of gas in my car, or spend \$50.00 for an ambulance."* (Birmingham/Nonelderly)

*"When it gets close to the end of the month, the food starts running out. It runs out when I'm getting checks and it runs out when I'm getting food stamps. At the end of the month, you compare your food and you're getting down to the end. Like right now."* (Fayette/Nonelderly)

*"I'm the head of the household...I have to do all the shopping, but when I got stamps, I'd go and buy it all at one time. I guess so I wouldn't have to go and put up with it [rude comments]. And it would run out...we started getting short about a week or so before the end of the month, I got two kids and all. To me with the check, it lasts longer, I don't know why. You know I buy it by the week instead of spending it all at one time. If I bought it all, I'd probably eat it all."* (Fayette/Nonelderly)

A few participants mentioned an aspect of check benefits that indirectly affects food budgeting because it can affect the proportion of the household's budget that will be available to buy food. These participants mentioned that check benefits might give their landlords the impression that they have more discretionary income than they actually had, and that the landlords might, therefore, raise the rent. Most participants had not had direct experience with this experience, but speculated that it could be a problem. Focus group participants said:

*"Because you can't tell unless you look real good that you got a food stamp check. Which, where I stay at, my manager is gonna try to charge me rent. I said no, this is my food stamp check. This is food. I said you don't get this."* (Birmingham/Elderly)

*"My landlord don't know about the check and if they find out they're gonna try and charge me extra rent."* (Fayette/Elderly)

*"I told her [landlord] what it was and everything and she said she couldn't mess with it, but if it wasn't for it being a food stamp check she would have cashed it."* (Fayette/Nonelderly)

*"Or you got the guy knocking on the door asking you for the rent and there you got the food stamp check laying on the coffee table, what are you going to do? I'd give it to him. Give the whole thing to him."* (Birmingham/Nonelderly)

## **C. CHECK-CASHING EXPERIENCES OF CHECK RECIPIENTS**

In the household survey, we asked check recipients about the types of establishments at which they usually cashed their checks, the amount of the check-cashing fee, if any, and any problems or inconveniences experienced when using check benefits. In the focus group discussions, we examined these issues, as well as the impact of check-cashing problems on recipients' future participation in the FSP.

Section VI.C.1 describes the findings from the household survey and the focus group discussions on the establishments at which checks were usually cashed. Section VI.C.2 describes the findings from the household survey on fees paid by recipients to cash their benefit checks. Section V.C.3 discusses check-cashing problems cited in the survey and in the focus group discussions.

To summarize the findings, check households typically cashed their benefit checks at retail food stores or banks. Less than 10 percent of check households paid a fee to cash their benefit checks, and the majority of households that did pay a fee paid \$1.00 or less. Relatively few check recipients (less than 10 percent) mentioned encountering significant problems when cashing or using their checks. Although the incidence of problems was rare, the most frequently cited ones included difficulties cashing benefit checks because of an improper ID or an insufficient number of IDs, limits imposed by retail stores on the amounts of the checks cashed, retail stores having insufficient funds to cover the benefit checks, and stores refusing to cash benefit checks. The focus group discussions suggest that the problems experienced when recipients cashed food benefit checks were similar to the ones experienced when recipients attempted to cash payroll or other checks.

### **1. Establishments Where Food Benefit Checks Usually Are Cashed**

Most check recipients cashed their benefit checks at retail food stores or banks. A majority (73 percent) of check recipients reported that they usually cashed their food benefit checks at retail food stores (Table VI.7); 23 percent of check recipients usually cashed their benefit check at banks. Less than one-half of one percent cashed their checks at check-cashing outlets. Rural check households

TABLE VI.7  
CHECK-CASHING EXPERIENCES OF CHECK RECIPIENTS  
(Percentage of Check Households)

	All Check Households
<b>Place Where Check Is Usually Cashed</b>	
Supermarket or grocery store	69.9
Other food store	3.4
Nonfood store	2.1
Bank	22.5
Deposit in bank	0.9
Check-cashing outlet	0.3
Other	0.9
<b>Was Purchase Required to Cash Check?<sup>a</sup></b>	
Yes	31.1
No	68.9
<b>Was a Fee Charged to Cash Check?</b>	
Yes	9.2
No	90.8
<b>Fee Paid to Have Check Cashed<sup>b</sup></b>	
\$0.25 or less	3.4
\$0.26 to \$0.50	22.4
\$0.51 to \$1.00	31.0
\$1.01 to \$2.00	25.9
\$2.01 to \$5.00	12.9
\$5.01 or more	4.3
<b>Mean Fee<sup>b</sup></b>	<b>\$1.67</b>
<b>Median Fee<sup>b</sup></b>	<b>\$1.00</b>
<b>Sample Size</b>	<b>1,255</b>

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

<sup>a</sup>Includes only households that cashed checks at retail stores (N = 939).

<sup>b</sup>The statistics given in these sections of the table are based on the fee amounts that were reported by the 116 households that reported paying a fee to cash their food stamp checks.

were 9 percentage points more likely than urban check households to cash their benefit checks at banks (27 percent versus 18 percent; Appendix Table J.9).

## **2. Check-Cashing Fees**

Very few check households (9 percent) paid a fee to cash their benefit checks (Table VI.7). Urban check households were five times more likely than rural households to pay a fee to cash their benefit check (16 percent versus 3 percent; Appendix Table J.9).

Most of the check households that paid a fee reported that it was relatively small. Fifty-seven percent reported paying \$1.00 or less; only 17 percent of check households that paid a check-cashing fee paid more than \$2.00 (Table VI.7). The average fee for those that paid a fee was \$1.67 (the median fee was \$1.00). To place this amount in context, check recipients who responded to the household survey received an average food stamp benefit of \$169 per month. Thus, a \$1.00 check-cashing fee reduced available benefits by about one-half of one percent of the face value of the benefit check.<sup>11</sup>

Although the vast majority of check households that usually cashed their benefit checks at retail stores did not have to pay a check-cashing fee, retail stores often required recipients to make a purchase in order to cash their benefit checks. Thirty-one percent of households that cashed their benefit checks at retail stores reported having to make a purchase (Table VI.7). Urban check households that cashed checks at retail stores were nearly twice as likely as rural households to be required to make a purchase in order to cash their benefit checks (39 percent versus 23 percent; Appendix Table J.9).

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<sup>11</sup>For purposes of comparison, a recent government report (U.S. General Accounting Office, 1988) indicates that fees for cashing government checks range from no charge to 25 percent of the face value of the check, and that the average fee paid on a \$500 check was \$8.50, or 1.7 percent of the face value.

### 3. Problems Cashing Benefit Checks

Very few check recipients (9 percent) reported having any problems when cashing checks (Table VI.8). Problems that were mentioned included: recipients not having the proper ID or a sufficient number of IDs to cash the benefit check (4 percent), the store limiting the amount of the check that it would cash (1 percent), the store refusing to cash the check (1 percent), and stores having insufficient funds to cash the checks (1 percent). Urban check households were more likely than rural check households to experience check-cashing problems (11 percent versus 7 percent; results not shown).

The discussion of check-cashing experiences in the focus groups did not reveal serious problems. Participants were able to cash food stamp benefit checks with relative ease. Many participants noted

that cashing a food stamp benefit check is no different than cashing any other check. They had the same experiences when cashing a payroll check, social security check, or Aid to Families with Dependent Children benefit check. No participants mentioned any problems serious enough to cause them to leave the FSP, nor did they know of anyone who had had such an experience. This sentiment is captured in the following comment by a focus group participant, who said:

*"They cash it like they would any other check. They don't say anything. I had one lady at the same grocery store that I've always went to, she thought it was an income tax check. She said, 'did you get it late?'" (Birmingham/Nonelderly)*

### D. TIME AND MONEY COSTS OF PARTICIPATION

Recipients incur time and money costs participating in the FSP. Some of these costs are specifically related to the issuance system, including the costs of obtaining benefits and the costs of dealing with any problems relating to the receipt and use of benefits, such as the cost of lost or delayed benefits. We asked focus group participants to discuss the time and money costs of obtaining and using benefits and the losses from lost or stolen benefits when using coupon and check benefits,

**TABLE VI.8**  
**CHECK-CASHING PROBLEMS EXPERIENCED BY CHECK HOUSEHOLDS**  
 (Percentage of Check Households)

Problem	All Check Households
None	91.5
Improper or Insufficient ID	4.2
Store Refused to Cash Check	1.4
Store Did not Have Enough Money to Cash Check	1.1
Limit on Amount of Check that Store Will Cash Without Purchase	0.8
Store Gave Credit Rather than Cash for Check	0.3
Other	2.1
Sample Size	1,255

**SOURCE:** Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

**NOTE:** Percentages do not sum to 100 percent because respondents could mention more than one check-cashing problem.

and then to state which form of benefit--checks or coupons--they thought required less time and money to participate in the program.

In this section, we present findings from the focus group discussions on the time and money costs of participating in the FSP in Alabama under the coupon- and check-issuance systems. From their own personal perspectives, most of the focus group participants thought checks were more cost-effective than coupons to use. They felt that the time and money costs of program participation were lower because the monthly trip to pick up benefits was eliminated, and because benefits were less likely to be lost or stolen.

### **1. Costs to Receive or Replace Benefits**

In Alabama, coupons are typically issued over-the-counter. Because the recipient must travel to the food stamp office to pick up the coupons, both money and time are spent in the process. Recipients incur transportation costs, by putting gas in their cars, buying bus tokens, or paying a neighbor, friend, or relative to take them to the food stamp office. Not surprisingly, the most frequently cited drawback to the use of coupons was the inconvenience of picking them up in-person at the food stamp office. Focus group participants said:

*"I went over there [to the food stamp office] at about 8:00 that morning and I didn't leave from over there till about 4:30...and they didn't fix the computers until after I had left."* (Birmingham/Nonelderly)

*"It used to be 15 miles for me before I moved in town."* (Fayette/Nonelderly)

*"You been there for hours. If you got somebody waiting for you they ain't gonna want to just keep waiting."* (Fayette/Nonelderly)

*"It could be \$3 or \$4 just to take you to town. Or if you use your own car, you still have to put \$2 or \$3 worth of gas in the car to go anyway, so."* (Fayette/Nonelderly)

*"And then they only have but one lady that works in there."* (Fayette/Nonelderly)

Only a small number of participants had ever had their food stamp coupons lost or stolen. Those who had had either experience cited the inability to receive replacement coupons as a disadvantage of using coupons. Focus group participants said:

*"I had my purse ripped off...two big guys cut it off my right arm and ran...I just took out my stamps that day. They [the food stamp office] wouldn't replace them. They acted like no big deal, it didn't matter if you have no food in your house. You end up waiting until next time."* (Birmingham/Nonelderly)

*"One time...when they was coming through the mail, sending them, mine got stolen. I went down to the welfare office and told them. They took me over to the jail to sign a warrant, I guess, for whoever done it...In a week they did, they gave me some more."* (Fayette/Nonelderly)

*"I heard about a bunch of peoples' that did get stolen. People expect them, about the time they're supposed to come, people would be there to check the mail. I was always be there waiting to get mine because I thought they was coming."* (Fayette/Nonelderly)

Some participants in Fayette County expressed annoyance that the food stamp office would not replace marred or damaged coupons, because they often had difficulty redeeming those coupons in grocery stores. Participants from Birmingham seemed to have more success obtaining replacement coupons. Focus group participants said:

*"And another thing, when you leave stuff in your pocket, food stamps, and they mess up more when they get washed in the washer than money. Because food stamps, I have had them to tear up, you know, in your pocket. You take them down there [the food stamp office], they can tell how much it was but they told me they wouldn't give me any back. They could tell what it was and they couldn't give them back to me. You know, money don't tear up that fast."* (Fayette/Nonelderly)

*"I know my baby one time, when he was real little, he tore up some of my stamps....But they know what it is. They seen, you know, it was three tens. They could tell what it was. They didn't give me any more. I mean you could tell it was in little pieces, it was awful tore up and ragged up and they wouldn't take it in the grocery store. They won't take them."* (Fayette/Nonelderly)

No one in the focus groups had lost their food stamp checks or had had them stolen, nor did they know of any one who had had these experiences. The respondents speculated that if they were



to encounter this type of problem, they would report it to the food stamp office and get a replacement check.

A few participants had experienced delays in the arrival of their benefit checks and were afraid that the check had been stolen from their mail boxes or had been lost in the mail. In most cases, the checks arrived within a few days, although one participant reported a longer delay. One focus group participant said:

*"They put the wrong address. Instead of putting Fayette, they put Winnfield, down there at the food stamp office. Well, I called and they never would tell me, they never would tell me. Finally, I called up there and I gave them [my address]. They said it's Winnfield, I say 'no ma'am, it's Fayette, Alabama.' Well, that made the check go back to Montgomery, see, we didn't get it until the 15th or 16th, so that left us, I mean we was kind of dragging the bucket. They used to mail it out on the first of the month, so we should have gotten it no later than the fourth." (Fayette/Nonelderly)*

## **2. Costs to Use Benefits**

**Time Spent at the Checkout Counter.** Whether coupons or checks are used, the shopping experience was comparable in terms of time spent at the checkout counter. Opinions varied as to whether the benefit form affected checkout time. Some participants thought that the amount of time required to get check-cashing approval was comparable to the amount of time used by the cashier to pull the food stamp coupons out of the book. A few thought that using coupons might be a little more time-consuming. Some participants used manufacturers' cents-off coupons, irrespective of whether they shopped with food stamp coupons or checks, so that the checkout process was somewhat time-consuming in either case. Some examples of what focus group participants said are:

*"It's the same. It's just like paying the grocery man with a personal check. It's about the same because the registers they got now is efficient. The registers, they will separate the food items from the nonfood items. Even if you're using coupons, you still get through the line in about the same time." (Birmingham/Elderly)*

*"Well, a lot of times when they're gonna give you change, they have to dig down to the bottom of the drawer. They have to reach under there and if they ain't got enough ones [coupons], then they have to run on down to another cash register and you have to stand there waiting until they get back with them." (Fayette/Elderly)*

**Ease of Coupon Redemption.** For the most part, participants shopped in the same stores regardless of whether they received checks or coupons. Although some participants mentioned knowing of stores that would not accept food stamp coupons, most members of the focus groups had not had direct experience with this problem. This inability to redeem coupons appeared to be a larger problem in the smaller stores in Fayette County. Focus group participants said:

*"You [the stores] have to be certified to take them. A lot of small ones, I never run into a large store that wouldn't take them. Like a small corner market or a small fruit stand, like some of them wouldn't take them because they weren't certified by the food stamp people to take them." (Fayette/Elderly)*

*"There was a store in Winnfield that had gas pumps and they caught them selling gas for food stamps and they stopped them from taking all food stamps. So, there's different reasons why they can't accept them." (Fayette/Elderly)*

*"Well, you have to go mostly to the big grocery stores, because....there's a store toward Winnfield, they don't take food stamps. If you want to get a snack or something, they don't take them." (Fayette/Nonelderly)*

**Reactions from Store Personnel and Customers.** "Stigma" can be viewed as a cost of participating in the FSP. As discussed previously in Section VI.A.3, overall, the behavior of store personnel and other customers improved when the food stamp recipients offered checks rather than coupons as payment. One participant mentioned that the store personnel were usually courteous, but that store patrons often made rude remarks about the quantity or quality of the food in the recipients' baskets when coupons were used as payment. When recipients paid with checks, they reported being treated the same as any other customer and reported a decrease in the verbal abuse they sustained while waiting in the checkout line, because it was difficult for other patrons and store personnel to ascertain the food stamp check's issuer.

**Sales Tax.** With respect to the sales tax levied on food and other grocery store items, most focus group participants recognized that their benefits had been adjusted upward by an amount equal to the sales tax that they now had to pay. Most of them considered themselves to be appropriately compensated for the tax, but others were unsure why they had to pay the tax and were not quite

convinced that they were not losing money with the new arrangement. Still others observed that they had occasionally been incorrectly charged a tax when paying with coupons. Focus group participants said:

*"When they figured out how many stamps you was gonna get, they are like, when they gave you the check, they already know how much you was supposed to draw and what they did is they added that extra on to make up for the taxes that you would have to pay per dollar on to it. Seven percent taxable." (Fayette/Nonelderly)*

*"I used to tell them [store clerks] about it [sales tax on coupon purchases] and they'd say 'well, it's in the register now. I can't do nothing about it. You should have told me you was gonna use stamps, you know'. I was gonna turn them in, but I didn't." (Fayette/Elderly)*

*"And there's still some convenience stores here that charge you tax. And you tell them they're not supposed to on the coupons and they still tax you....and I called the food stamp office and they said there wasn't nothing really they could do about it." (Fayette/Elderly)*

#### **E. ATTITUDES ABOUT PROGRAM PARTICIPATION**

In the household survey, we asked check households that had always received their benefits in the form of checks about the incentives provided by check benefits to apply for and remain in the FSP. All of these recipients were asked: "Would the household stay in the program if your benefits are switched from checks to coupons?" A subset of these check recipients, who had known when they applied for FSP benefits that benefits were available as food checks, were asked: "Would your household have participated in the FSP if the benefit was not in the form of a check?"

Ninety-seven percent of the recipients who had always received checks responded that they would continue to participate in the FSP if their benefit form were to be converted to coupons (Table VI.9). All of these recipients reported that they would have applied for program benefits even if the check form had not been available. Thus, although households that had always received benefits as checks might have preferred checks to coupons, in the absence of cash-out, they would have applied for benefits initially and would have participated in the program.

In the focus group discussions, some participants mentioned that they knew of eligible nonparticipating households that would probably participate if coupon benefits were replaced by

TABLE VI.9  
PERCEPTIONS OF THE IMPACT OF CASH-OUT ON PARTICIPATION  
IN THE FOOD STAMP PROGRAM  
(Percentage of Checks-Always Households)

Participation Measure	Percentage
Would Household Stay in the FSP if Benefits Switched to Coupons? <sup>a</sup>	
Yes	97.7
No	2.3
Would Households Have Participated if Benefit in the Form of Checks Had Not Been Available? <sup>b</sup>	
Yes	100.0
No	0.0

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

<sup>a</sup>Sample size = 130.

<sup>b</sup>Sample size = 36.

FSP = Food Stamp Program.

check benefits. Generally, they said that these persons were eligible for modest benefit amounts, in the range of \$20 to \$30, but that they did not participate in the FSP because of the time and money costs involved in picking up benefits from the issuance office. This sentiment is captured in the following comment by a focus group participant, who said:

*"Yeah, I know a couple of people that could probably get benefits, they wouldn't get much, maybe \$20 or \$25, but they won't go get them because it's only that small amount of stamps and if they could get a check they would probably go sign up for the check knowing it was going to be mailed to the house. Because they feel like \$20 or \$25 ain't enough to go bother driving in and spending gas, or like a lot of these ladies said, you have to pay somebody \$5 to go take them in to get them and you take \$5 off and you haven't got much left."*  
(Fayette/Nonelderly)

## **VII. COMPARISONS OF FINDINGS ON RECIPIENT IMPACTS FROM THE EVALUATIONS OF THE ALABAMA AND SAN DIEGO CASH-OUT DEMONSTRATIONS**

In this chapter, we highlight key comparisons between the findings from the evaluations of the *pure* food stamp cash-out demonstrations in Alabama and San Diego County. We also advance hypotheses about why many of the findings from the two demonstration sites differ. When assessing the implications of the findings discussed in this chapter, it is important to note that evaluations of food stamp cash-out *in the context of welfare reform* are being conducted in the states of Washington and Alabama. To fully assess the cash-out approach to the issuance of food stamp benefits, it will be important to consider the findings from the latter evaluations.

### **A. COMPARISONS OF THE FINDINGS FROM ALABAMA AND SAN DIEGO**

We begin this section by comparing findings on the effects of cash-out in Alabama and San Diego that are based on the detailed food-use data that were collected during the household surveys. We then expand the discussion to include comparisons made on the basis of other components of the survey data, including nonfood expenditures and recipients' attitudes toward and experiences with cash-out. Several tables in this chapter recapitulate and bring together key findings from earlier chapters in this report and from the final report on the evaluation of the San Diego Food Stamp Cash-Out Demonstration (Ohls et al., 1992).

#### **1. The Money Value of Food Used and the Availability of Food Energy**

Changes in food-use behavior in Alabama and San Diego as a consequence of cash-out are displayed in Table VII.1. This table shows that food stamp households in Alabama responded differently to cash-out than did their counterparts in San Diego. The recipients of food stamp checks in Alabama made very few statistically significant changes in their use of food. Most notably, they

TABLE VII.1  
COMPARISON OF CASH-OUT EFFECTS ON SELECTED MEASURES OF  
HOUSEHOLD FOOD USE IN SAN DIEGO AND ALABAMA

Measure of Food Use	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Money Value of Food Used at Home per ENU</b>					
<b>Purchased Food</b>					
San Diego	33.28	35.70	-2.42	-6.78	2.45 <sup>††</sup>
Alabama	33.43	33.66	-0.23	-0.68	0.31
<b>All Food</b>					
San Diego	35.95	37.63	-1.68	-4.46	1.62 <sup>†</sup>
Alabama	36.25	36.41	-0.16	-0.44	0.21
<b>Food Energy Availability per ENU</b>					
<b>Average Availability of Food Energy (percent of RDA)</b>					
San Diego	133.58	140.00	-6.42	-4.59	1.76 <sup>††</sup>
Alabama	162.19	161.46	0.73	0.45	0.22
<b>Percent of Households Meeting or Exceeding RDA for Food Energy</b>					
San Diego	68.75	74.09	-5.34	-7.21	1.94 <sup>††</sup>
Alabama	79.65	79.81	-0.16	-0.20	0.10
<b>Sample Size</b>					
San Diego	542	536			
Alabama	1,209	1,080			

SOURCE: Evaluations of the San Diego and Alabama Food Stamp Cash-Out Demonstrations, household surveys (weighted tabulations for San Diego).

NOTE: One-tailed statistical tests for lower money value of food used at home and lower availability of food energy among check recipients were performed on the check-coupon differences shown in this table.

ENU = equivalent nutrition unit, RDA = recommended dietary allowance.

<sup>†</sup>Statistically significant at the 90 percent confidence level, one-tailed test.

<sup>††</sup>Statistically significant at the 95 percent confidence level, one-tailed test.

did not alter their food-use behavior in ways that reduced either the money value of the food that they used or the availability of food energy.

In San Diego, food stamp cash-out resulted in reductions of 4 percent to 7 percent in the money value of food used at home and in the availability of food energy (Table VII.1). In addition, the percentage of food stamp households that used food providing energy in amounts that equalled or exceeded the recommended dietary allowance was 5 points lower among check recipients than among coupon recipients. All of these differences are statistically significant at conventional levels of statistical precision.

## **2. The Availability of Micronutrients**

When we consider seven micronutrients that are potentially problematic from a public health perspective, we find some negative effects of cash-out on nutrient availability in San Diego, but no negative effects in Alabama. Our estimates for San Diego show that cash-out resulted in statistically significant reductions of 4 percent in the availability of vitamin B<sub>6</sub> and calcium (Table VII.2). In contrast, our estimates for Alabama show that cash-out did not result in significant reductions in the availability of any of the seven micronutrients. The Alabama estimates of the effects of cash-out on the availability of these nutrients are all smaller than the corresponding San Diego estimates, and they are inconsistent in sign.

## **3. Sources of Food Energy**

A potentially beneficial effect of cash-out in San Diego was a shift of 1 percentage point away from fat and to carbohydrate as a source of food energy (Table VII.3). Despite this shift, check recipients in San Diego are far from achieving the dietary guideline of obtaining no more than 30 percent of food energy from fat. Food stamp households in Alabama are even farther from achieving that guideline; both check recipients and coupon recipients obtain about 43 percent of their food energy from fat. Among urban households in Alabama, cash-out induced a shift away from fat and



TABLE VII.2  
COMPARISON OF CASH-OUT EFFECTS ON MICRONUTRIENT AVAILABILITY  
PER ENU IN SAN DIEGO AND ALABAMA  
(Percentage of RDA)

Nutrient	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Vitamin A					
San Diego	210.92	214.40	-3.48	-1.63	0.38
Alabama	227.32	229.71	-2.39	-1.04	0.26
Vitamin C					
San Diego	265.51	276.14	-10.63	-3.85	0.75
Alabama	250.63	255.40	-4.77	-1.87	0.60
Vitamin B <sub>6</sub>					
San Diego	154.96	161.56	-6.60	-4.08	1.38 <sup>†</sup>
Alabama	157.59	157.30	0.29	0.19	0.09
Folate					
San Diego	225.38	230.54	-5.16	-2.24	0.54
Alabama	223.94	221.69	2.25	1.02	0.39
Calcium					
San Diego	118.25	123.72	-5.47	-4.42	1.36 <sup>†</sup>
Alabama	121.34	117.61	3.73	3.18	1.23
Iron					
San Diego	163.43	160.61	2.82	1.76	0.49
Alabama	183.99	183.87	0.12	0.06	0.02
Zinc					
San Diego	119.60	123.73	-4.13	-3.33	1.21
Alabama	127.28	128.87	-1.59	-1.23	0.56
Sample Size					
San Diego	542	536			
Alabama	1,209	1,080			

SOURCE: Evaluations of the San Diego and Alabama Food Stamp Cash-Out Demonstrations, household surveys (weighted tabulations for San Diego).

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit (ENU), which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in this table.

RDA = recommended dietary allowance.

<sup>†</sup>Statistically significant at the 90 percent confidence level, one-tailed test.

TABLE VII.3

COMPARISON OF CASH-OUT EFFECTS ON THE PERCENT OF FOOD ENERGY  
OBTAINED FROM PROTEIN, FAT, AND CARBOHYDRATE

Source of Food Energy	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>San Diego</b>					
Protein	14.89	14.85	0.04	0.27	0.20
Fat	37.76	38.79	-1.03	-2.66	2.04 **
Carbohydrate	47.35	46.36	0.99	2.14	1.76 *
<b>Alabama</b>					
All Food Stamp Households					
Protein	14.18	14.20	-0.02	-0.14	0.15
Fat	42.42	42.96	-0.54	-1.28	1.53
Carbohydrate	43.40	42.84	0.56	1.33	1.45
Urban Food Stamp Households					
Protein	14.85	14.95	-0.10	-0.67	0.51
Fat	42.41	43.48	-1.07	-2.48	2.06 **
Carbohydrate	42.75	41.57	1.18	2.84	2.02 **
Rural Food Stamp Households					
Protein	13.56	13.54	0.02	0.15	0.10
Fat	42.42	42.50	-0.08	-0.19	-0.16
Carbohydrate	44.02	43.96	0.06	0.14	0.11
<b>Sample Size</b>					
San Diego	542	536			
Alabama					
All	1,209	1,080			
Urban	583	506			
Rural	626	574			

SOURCE: Evaluations of the San Diego and Alabama Food Stamp Cash-Out Demonstrations, household surveys (weighted tabulations for San Diego).

NOTE: Two-tailed statistical tests were performed on the check-coupon differences shown in this table.

\*Statistically significant at the 90 percent confidence level, two-tailed test.

\*\*Statistically significant at the 95 percent confidence level, two-tailed test.

to carbohydrate of the same magnitude as in San Diego; however, no such shift occurred among rural households. The absence of a shift among rural households dampened the effect of cash-out on the sources of food energy among all food stamp households in Alabama and caused it to be insignificant at conventional levels of statistical precision.

#### **4. Perceptions of Food Adequacy**

Objective measures of household food use and nutrient availability reveal a number of small, but statistically significant, negative effects of cash-out in San Diego; however, they reveal no negative effects in Alabama. In contrast, subjective measures of the adequacy of the home food supply reveal no negative effects of cash-out in either demonstration site. According to the three subjective measures shown in Table VII.4, respondents to the household survey in San Diego were substantially more likely than those in Alabama to perceive their home food supplies to be inadequate; however, no evidence from either site shows that check recipients were more likely than coupon recipients to perceive their home food supplies to be inadequate. In fact, check recipients were somewhat less likely than coupon recipients to report not having enough food, going entire days without food or the resources to buy food, and skipping meals because of inadequate food.

#### **5. Food and Nonfood Expenditure Shares**

We combined the survey measure of expenditures for food used away from home and the measure of the money value of purchased food used at home to obtain a measure of total expenditures for food. We used the latter measure and its two components, along with measures of expenditures in nine broad, nonfood consumption categories, in order to analyze the effects of cash-out on the shares of total consumption expenditures allocated to a total of eleven food and nonfood consumption categories. Table VII.5 summarizes our findings from San Diego and Alabama for four key consumption categories.

TABLE VII.4  
COMPARISON OF CASH-OUT EFFECTS ON RECIPIENTS' PERCEPTIONS  
OF ADEQUACY OF HOUSEHOLD FOOD SUPPLY  
(Percentage of Households)

	Percentage		Difference in Percentages		
	Check	Coupon	Absolute	Percentage	t-Statistic
<b>Sometimes or Often not Enough Food During Past Month</b>					
San Diego	26.88	30.90	-4.02	-13.01	1.50
Alabama	16.02	18.57	-2.55	-13.74	1.64
<b>Any Days Household Without Food or Resources During Past Month?</b>					
San Diego	33.53	37.77	-4.24	-11.23	1.50
Alabama	21.20	23.43	-2.23	-9.54	1.31
<b>Any Household Member Skip Meals due to Inadequate Food or Resources During Past Month?</b>					
San Diego	17.77	21.63	-3.86	-17.85	1.64
Alabama	8.21	9.90	-1.69	-17.12	1.44
<b>Sample Size</b>					
San Diego	572	571			
Alabama	1,255	1,131			

**SOURCE:** Evaluations of the San Diego and Alabama Food Stamp Cash-Out Demonstrations, household surveys (weighted tabulations for San Diego).

**NOTE:** One-tailed statistical tests for lower perceptions of food adequacy among check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

"Past month" is the month preceding the survey.

TABLE VII.5

COMPARISON OF CASH-OUT EFFECTS ON EXPENDITURE SHARES FOR SELECTED  
FOOD AND NONFOOD CONSUMPTION CATEGORIES IN SAN DIEGO AND ALABAMA  
(Percentage of Total Expenditures)

Consumption Category	Mean Share of Total Expenditures		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
All Purchased Food (Used at Home and Away from Home)					
San Diego	32.38	33.95	-1.57	-4.62	2.11 <sup>††</sup>
Alabama	43.31	43.43	-0.12	-0.27	0.15
All Shelter					
San Diego	51.42	49.42	2.00	4.01	2.02 <sup>††</sup>
Alabama	33.98	32.80	1.18	3.59	1.53 <sup>†</sup>
Medical					
San Diego	0.85	0.43	0.42	97.67	2.43 <sup>††</sup>
Alabama	4.70	4.43	0.27	5.96	0.66
Education					
San Diego	0.49	0.32	0.17	53.13	1.65 <sup>††</sup>
Alabama	1.02	1.26	-0.24	-18.85	1.91
Sample Size					
San Diego	542	536			
Alabama	1,209	1,080			

SOURCE: Evaluations of the San Diego and Alabama Food Stamp Cash-Out Demonstrations, household

surveys (weighted tabulations for San Diego).

NOTE: One-tailed statistical tests for a lower expenditure share for all purchased food and for greater

The reductions in expenditures for food used at home resulting from cash-out in San Diego were accompanied by a statistically significant decrease of 1.57 percentage points in the share of total household expenditures allocated to food. No such decrease occurred in Alabama, where the food expenditure share was essentially the same for check households and for coupon households. Check recipients in San Diego shifted expenditures from food to shelter, medical care, and education. In Alabama, the share of total expenditures allocated to shelter by check households was one percentage point higher than for coupon households. Virtually this entire increase is accounted for by a puzzling increase in the share of expenditures allocated to utilities under cash-out in Alabama. We found no other statistically significant effects of cash-out on expenditure shares in either demonstration site.

## **6. Attitudes Toward Checks and Coupons**

Check and coupon recipients in San Diego and Alabama generally gave similar responses when asked what is good about checks and coupons. The most commonly cited advantage of checks was that they can be used to purchase items other than food; about 40 percent of check and coupon recipients in both sites cited this feature as an advantage of checks (Table VII.6). Although recipients in both sites mentioned avoiding embarrassment and being able to shop in a wider range of stores when using food stamp benefits as advantages of checks, those in San Diego were three to four times more likely than their Alabama counterparts to cite these features of checks. In Alabama, where food stamp coupons are typically issued over-the-counter at county food stamp offices, and where checks were issued by mail, recipients liked the fact that, under cash-out, they no longer had to go to the food stamp office to pick up their benefits. Recipients in San Diego did not mention this feature as an advantage of checks because, under both the coupon- and check-issuance systems in that county, benefits were mailed to most recipients.

Substantial percentages of check and coupon recipients in both San Diego and Alabama cited as an advantage of coupons their belief that coupons ensure that the benefits are spent on food;

**TABLE VII.6**  
**COMPARISON OF RECIPIENTS' ATTITUDES TOWARD CHECKS**  
**AND COUPONS IN SAN DIEGO AND ALABAMA**  
(Percentage of Households)

Attitude	Check Recipients		Coupon Recipients	
	San Diego	Alabama	San Diego	Alabama
<b>Advantages of Checks</b>				
Can be used for items other than food	42.1	42.9	39.7	39.4
More choices of stores	19.0	5.7	13.3	4.0
Do not feel embarrassed	16.2	5.3	10.5	2.8
Do not have to go to issuance office <sup>a</sup>	NA	16.2	NA	6.9
<b>Advantages of Coupons</b>				
Make sure benefits are spent on food	40.1	26.2	55.4	37.8
No taxes charged <sup>b</sup>	1.2	17.8	1.6	25.8
Sample Size	572	1,255	571	1,131
<b>Coupons Are More Helpful in Planning and Budgeting Food Expenses</b>				
Strongly agree or agree	43.6	52.2	62.7	79.4
Strongly disagree or disagree	56.3	47.8	37.3	20.7
Sample Size	543	1,144	513	982

SOURCE: Evaluations of the San Diego and Alabama Food Stamp Cash-Out Demonstrations, household surveys (weighted tabulations for San Diego).

<sup>a</sup>In Alabama, food stamp coupons are issued primarily over-the-counter, at local food stamp offices. In San Diego, food stamp coupons were issued primarily by mail.

<sup>b</sup>In Alabama, a sales tax is imposed on cash purchases of food, but not on coupon purchases of food. In California, no sales tax is imposed on food.

NA = not applicable.

however, recipients in San Diego were more likely than recipients in Alabama to mention this feature of coupons (Table VII.6). Eighteen percent of check recipients and 26 percent of coupon recipients in Alabama cited the absence of sales taxes on coupon purchases of food as an advantage of coupons.<sup>1</sup> These households may not have been aware that the State of Alabama added an extra amount to all check benefits to offset the taxes that are charged on cash purchases of food.

Food stamp recipients in Alabama were more likely than those in San Diego to report that the planning and budgeting of food expenses is easier with coupons than with checks. Table VII.6 shows that majorities of both check and coupon recipients in Alabama agreed with the statement that "food stamp coupons are more helpful in planning and budgeting the household's monthly food expenses." In San Diego, most coupon recipients agreed with the statement, but most check recipients disagreed with it.

## **7. Check-Cashing Experiences**

Food stamp recipients in Alabama generally used different types of establishments to cash their benefit checks than did recipients in San Diego. Table VII.7 shows that recipients in Alabama were twice as likely as those in San Diego to cash their benefit checks in supermarkets, grocery stores, or other food stores (73 percent versus 38 percent). Nineteen percent of check recipients in San Diego cashed their benefit checks at check-cashing agencies, whereas less than 1 percent of recipients in Alabama did so.

Check recipients in San Diego were four times more likely than those in Alabama to pay a fee in order to cash their benefit checks; 37 percent of San Diego check recipients paid a fee to cash their checks, compared with only 9 percent of Alabama check recipients. When recipients had to pay a fee to cash their benefit checks, Alabama recipients generally paid lower fees than did San Diego recipients. Relative to the check-cashing fees paid in San Diego, the fees paid in Alabama were much more likely to be \$1 or less, and much less likely to exceed \$5.

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<sup>1</sup>In California, no sales tax is imposed on food.



TABLE VII.7  
COMPARISON OF CHECK-CASHING EXPERIENCES OF  
CHECK RECIPIENTS IN SAN DIEGO AND ALABAMA

Measure	Check Recipients	
	San Diego	Alabama
Place Where Check Is Usually Cashed (in percentages)		
Supermarket, grocery store, or other food store	37.9	73.3
Bank	36.9	23.4
Check-cashing agency	19.3	0.3
Other	5.8	3.0
Percent Paying a Fee to Cash Check	37.3	9.2
Fee Paid to Have Check Cashed (in percentages) <sup>a</sup>		
\$1.00 or less	38.1	56.9
\$1.01 to \$5.00	42.0	38.8
\$5.01 or more	20.0	4.3
Median Fee (in dollars) <sup>a</sup>	1.99	1.00
Percent Having Problems Cashing Checks	14.6	8.5
Sample Size	572	1,255

SOURCE: Evaluations of the San Diego and Alabama Food Stamp Cash-Out Demonstrations, household surveys (weighted tabulations for San Diego).

<sup>a</sup>Based on data for 208 households in San Diego and 116 households in Alabama that paid a fee to have checks cashed and reported the amount of the fee.

Although recipients in San Diego were more likely than recipients in Alabama to report problems cashing their benefit checks, check-cashing problems were rare for recipients in both locations. Fifteen percent of all check recipients in San Diego reported one or more problems cashing their benefit checks, compared with 9 percent of all check recipients in Alabama.

## **B. HYPOTHESES ABOUT THE DIFFERENTIAL EFFECTS OF CASH-OUT IN SAN DIEGO AND ALABAMA**

Before collecting and analyzing the data for the evaluations of the San Diego and Alabama Food Stamp Cash-Out Demonstrations, we believed that cash-out was more likely to reduce food consumption in Alabama than in San Diego. This expectation was based on both theoretical and empirical considerations.

On theoretical grounds, it seems likely that the issuance of food stamp benefits as coupons rather than as cash would have the largest effects on households for which food stamp benefits constitute a relatively large share of total purchasing resources. In particular, the more dependent a household is on food stamps for its overall purchasing power, the more likely it is that the issuance of food stamp benefits as coupons rather than as cash would constrain how the household spends its resources.<sup>2</sup>

Levels of cash income are generally lower in Alabama than in California. In addition, California's Aid to Families with Dependent Children (AFDC) benefit schedule is one of the nation's most generous, whereas Alabama's is among the least generous. As a result of these factors, we anticipated that cash-out was more likely to reduce food consumption in Alabama than in San Diego.

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<sup>2</sup>Southworth (1946), as summarized by Fraker (1990), provided the seminal study of how the relative size of the food stamp benefit in a household's total purchasing power interacts with the form of the benefit to determine the impact of the benefit on food consumption. As Southworth shows, standard microeconomic theory suggests that the expected effect of the benefit form depends crucially on whether the household is "constrained" by the use of coupons in the sense that the value of the coupons is greater than the value of the food the household would purchase if all of its purchasing resources accrued as cash. Whether a food stamp household is so constrained can be inferred empirically by whether it makes all of its food purchases with coupons (and makes no supplemental purchases with cash), or whether it also supplements its food acquisition with cash purchases.

Selected data elements from our household surveys in San Diego and Alabama are consistent with this line of reasoning and, if considered in isolation from other data elements in the survey, provide an additional reason to believe that cash-out would be more likely to reduce food consumption in Alabama than in San Diego. The average cash income of coupon households in San Diego (\$877 per month) is twice as high as that in Alabama (\$441). That income disparity is the main reason why the average food stamp benefit amount received by coupon households in San Diego (\$118) is 30 percent lower than that in Alabama (\$169). As a consequence of these differences, food stamp benefits constitute a much larger percentage of the total monthly resources available to coupon households in Alabama (28 percent) than in San Diego (12 percent). Finally, the survey data show that 94 percent of coupon households in San Diego, compared with only 67 percent in Alabama, use some of their cash income to make supplemental purchases of food. In Southworth's theoretical framework, these selected findings from the household surveys indicate that cash-out would be more likely to reduce food consumption in Alabama than in San Diego.

Our findings of small but significant reductions in food consumption by San Diego households in response to cash-out and of essentially no changes in food consumption by Alabama households are counter to our a priori expectations. In the remainder of this section, we present our hypotheses to explain why our findings from San Diego and Alabama are counter to our expectations. Additional plausible hypotheses are likely to be advanced by others.

### **1. Hypotheses Related to the Design and Implementation of the Demonstrations**

Four of our five hypotheses to explain why, counter to our expectation, cash-out had a larger negative effect on food consumption in San Diego than in Alabama concern differences in the designs of the demonstrations in the two sites.

**a. The Visibility of the Demonstrations**

The introduction of "pure" food stamp cash-out was much more visible in San Diego than in Alabama. In San Diego, cash-out began with the conversion of a substantial proportion of the food stamp caseload (20 percent) to checks, and with the intention to convert the entire caseload to checks within one year. In addition, the San Diego Department of Social Services was extremely enthusiastic about the demonstration and generated extensive publicity for it by issuing news releases to the media and by other similar measures.

In Alabama, the pure cash-out demonstration was much smaller; it involved only 4 percent of the food stamp caseload in the 12 affected counties. Those counties were scattered throughout the state and constituted less than one-fifth of the state's 67 total counties. Furthermore, the introduction of pure cash-out received relatively little media attention.

These differences in the visibility of the demonstrations might have led check recipients in San Diego to be more aware of the program change and to consider that change as permanent. This perception, in turn, might have led those check recipients to make more complete adjustments in their food consumption behavior than they otherwise would have made.

**b. The Duration of the Demonstrations**

The demonstration of pure food stamp cash-out lasted merely eight months in Alabama, but is scheduled to last for five years in San Diego. Given the relatively brief duration of the Alabama demonstration, some check recipients in Alabama might have decided that it made more sense to simply continue to use the check benefits in the same way that they had previously used coupon benefits. The establishment of new budgeting, shopping, and food-use patterns makes more sense if the time cost and other costs associated with learning such procedures can be amortized over a long period.

**c. The Elapsed Time Between Initial Cash-Out and Data Collection**

San Diego County began issuing benefits in the form of checks to 20 percent of its food stamp caseload in July of 1989. We collected the interview data for the evaluation of the San Diego demonstration from May to August of 1990. Thus, the San Diego households whose benefits were converted from coupons to checks had at least 10 months, and as many as 14 months, to adjust their food-use behavior before being interviewed.

Alabama began issuing benefit checks to approximately 4 percent of the food stamp caseload in the pure cash-out demonstration counties in May of 1990.<sup>3</sup> Due to the need to complete survey field operations before the seasonal changes in food use associated with the Thanksgiving and Christmas holidays, we began collecting food-use data from a sample of check and coupon recipients in August of 1990. We completed our survey field operations in November of 1990. Thus, food stamp recipients in Alabama whose benefits had been converted from coupons to checks had a minimum of three months, and a maximum of seven months, to adjust their food-use behavior before being interviewed.

If households require more than just a few months to fully adjust their food-use behavior in response to the cashing-out of their food stamp benefits, then the short elapsed time between the commencement of cash-out in Alabama and the collection of food-use data might have resulted in estimates of cash-out effects that are small relative to the effects that might have been manifested over a longer period. We would expect this to be less of a problem in San Diego, where most of the survey respondents were interviewed a year or more after the commencement of cash-out.

An analysis of the money value of food used at home by month of interview revealed no significant check-coupon differences among Alabama food stamp recipients in any of the four survey months. It also revealed no trend in check-coupon differences over time within the survey fielding

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<sup>3</sup>In Alabama, pure cash-out was originally scheduled to begin in January and to end in December of 1990. As a result of problems with the development of the required computer software, the commencement of the demonstration was delayed by four months.

period. This finding provides no empirical support for the hypothesis that the relatively short elapsed time between the commencement of cash-out in Alabama and the collection of household food-use data contributed to the divergence in our estimates of the effects of cash-out in Alabama and San Diego.<sup>4</sup>

**d. A Combined Food Stamp and AFDC Check in San Diego**

In the Alabama demonstration of pure food stamp cash-out, all food stamp checks were issued independently from any other assistance checks and were mailed in separate envelopes according to a schedule that was unique to the Food Stamp Program. In contrast, San Diego County issues AFDC and food stamp benefits in the form of single check made out to a recipient household for the combined amount of its benefits under the two programs. (A notice that accompanies the check provides a breakdown of the combined benefit into its component amounts.) Eighty-eight percent of food stamp check recipients in San Diego also receive AFDC benefits and, hence, receive a combined check.

Many recipients of combined AFDC and food stamp checks in San Diego were unable to correctly report their food stamp benefit amounts to our survey field staff. They frequently reported either the AFDC benefit amount or the sum of the AFDC and food stamp benefit amounts as being their food stamp benefit amount. After carefully evaluating the self-reported AFDC and food stamp benefit amounts, we concluded that those data were highly unreliable; thus, when analyzing the

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<sup>4</sup>A related analysis found no significant difference in the mean money value of food used at home between Alabama households that had *always* received their food stamp benefits in the form of checks (these households had began participating in the FSP subsequent to the commencement of cash-out) and households that were receiving coupons. The households that had always received their food stamp benefits in the form of checks did not personally experience the transition from coupons to checks, so, presumably, they did not need a long adjustment period for the true impact of the check benefit on their food use to *manifest itself*. The absence of a significant cash-out effect among these households is further evidence that our finding of no effect of cash-out on a full cross-section of the food stamp caseload is not biased by the relatively short elapsed time between the commencement of cash-out and the collection of household food-use data. The findings from both of these analyses are described in project memo ALC-190, dated 6-5-92.

effects of the demonstration, we used benefit data obtained from county food stamp and AFDC program files.<sup>5</sup>

When the food stamp benefit is so intermingled with the AFDC benefit that the recipient might have difficulty distinguishing the two, the ability of the recipient to set aside the food stamp benefit for the purchase of food is compromised. Under these conditions, the probability is increased that the recipient will use the food stamp benefit in much the same way that he or she uses the AFDC benefit and other cash income. Thus, combining the AFDC and food stamp benefits in San Diego, in contrast to issuing distinctly different checks under those two programs in Alabama, might have contributed to the finding that cash-out had a number of significantly negative effects on food consumption in San Diego, but had essentially no effects in Alabama.

## **2. A Hypothesis Related to Differences Between the Food Stamp Caseloads in San Diego and Alabama**

The households in the food stamp caseload in Alabama might, on average, be more resistant to change than those in San Diego. If so, we would expect the Alabama caseload to respond to external changes more slowly and less completely than would the San Diego caseload. Such differential responses might partially explain our finding of essentially no effects of cash-out on food-consumption behavior in Alabama, and of a number of small but significant negative effects in San Diego.

An examination of several variables that might be proxies for the degree to which a population group is "traditional" or "conservative" in its attitude toward change supports the characterization of the Alabama caseload as being likely to be more traditional and conservative than the San Diego caseload. First, about one-half of Alabama's food stamp caseload resides in rural counties, whereas all of San Diego's caseload resides in an urban county.<sup>6</sup> In addition, data from the household

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<sup>5</sup>In the Alabama evaluation, we also used food stamp and AFDC benefit data obtained from state program files. We did so not because of any problems with the recipient-reported benefit amounts, but, rather, to maintain comparability between the two evaluations of pure cash-out.

<sup>6</sup>Program data for December 1989 show that 54 percent of Alabama's food stamp caseload resides in rural counties.

surveys show that only 41 percent of food stamp recipients in Alabama have completed high school, compared with 56 percent in San Diego, and that 25 percent of recipient households in Alabama include an elderly person, compared with only 2 percent in San Diego.<sup>7</sup> Those who live in rural areas, have little education, or are elderly might be more likely to follow established routines in many aspects of their lives, rather than to experiment with new ways of doing things. Moreover, the common images of California as having a relatively untraditional population, and of the South as having a very traditional population, which is resistant to change, further support this hypothesis.

In our analyses of differences in regression-adjusted mean values of the principal food-consumption outcome measures in the evaluations of the San Diego and Alabama Food Stamp Cash-Out Demonstrations, we imposed crude controls for urban-rural residence, education, and age. Nevertheless, we still found a number of negative effects of cash-out in San Diego and essentially no effects in Alabama. The persistence of these findings in the presence of those controls suggests that the hypothesis that Alabama's food stamp caseload is more traditional than San Diego's might be limited in its capacity to account for the differences in our findings between the two demonstration sites. However, the controls that we imposed for the effects of those variables were rather crude and, more importantly, the cash-out data sets provide few measures of, or proxies for, subtle characteristics of traditional populations that might influence the responses of those populations to cash-out. Therefore, it would be premature to entirely reject this hypothesis.

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<sup>7</sup>The statistics cited in the text are from Table II.3 of Ohls et al. (1992) and from Table III.3 of this report. California provides elderly food stamp recipients who also receive Supplemental Security Income with a combined benefit in the form of a single monthly check. Such individuals are not included in the 2 percent figure that is cited in the text. An alternative measure of age from the household surveys is the percentage of sampled persons among the households that participated in the surveys who are at least 35 years old: 60 percent in Alabama, and 36 percent in San Diego.